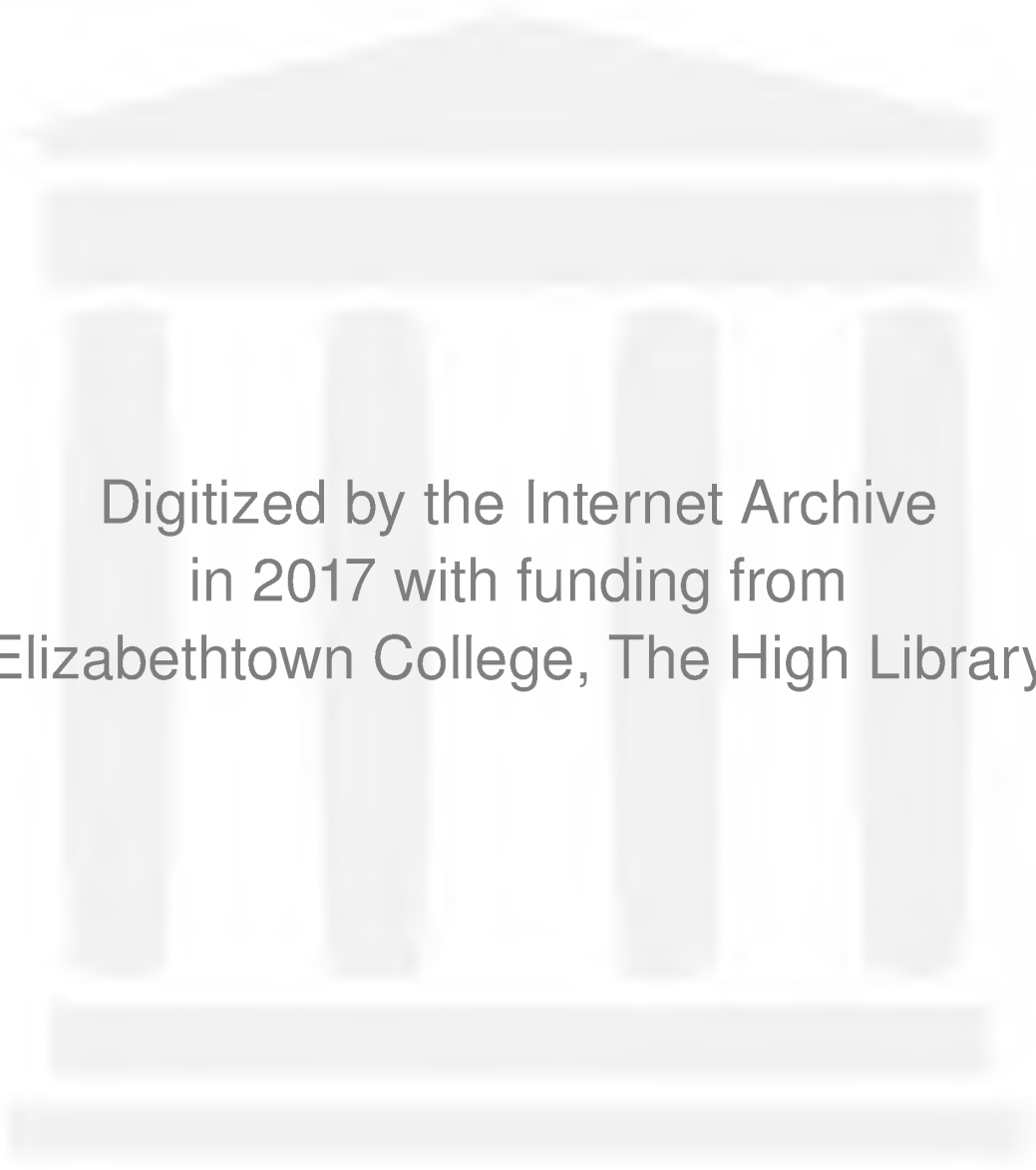


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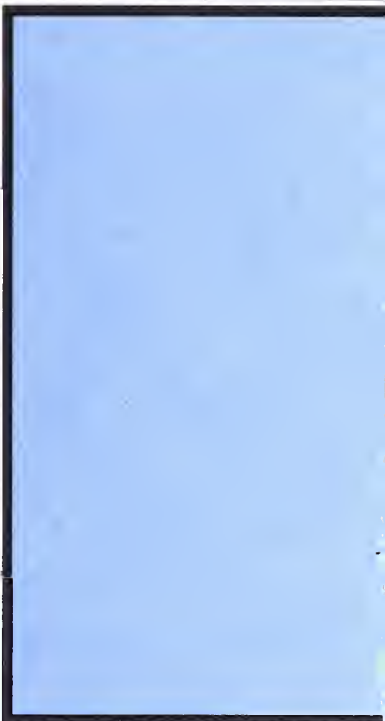
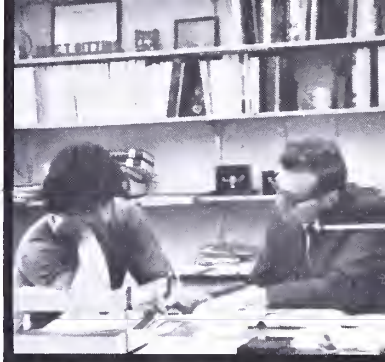
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For Reference

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ELIZABETHTOWN, PENNSYLVANIA

Elizabethtown College is accredited by the Middle States Association of Colleges and Secondary Schools, the only accrediting association for colleges in this area of the United States.

Students are to be governed by the policies and provisions contained in this Bulletin, subject to the right of the trustees, administration, and faculty to repeal, change, or amend them at any time.

Vol. LI

June 1975

No. 4

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Elizabethtown College is an Equal Opportunity institution.

CALENDAR

1975-76

FALL SEMESTER

September 2-3	Faculty Meetings & Orientation
September 3	Registration
September 4	Classes begin 8 a.m.
October 22	Mid-term
October 24	Reading Day (No Classes)
November 26	Thanksgiving recess begins 10 p.m.
December 1	Classes resume 8 a.m.
December 12	Classes end 5 p.m.
December 15-19	Final exams

SPRING SEMESTER

January 5-9, 12	In-service programs
January 12	Registration
January 13	Classes begin 8 a.m.
March 3	Mid-term
March 5	Spring recess begins 5 p.m.
March 15	Classes resume 8 a.m.
April 6	No Classes
April 16	Easter recess begins 5 p.m.
April 21	Classes resume 8 a.m.
April 28	Classes end 10 p.m.
April 30-May 5	Final exams
May 9	Commencement

SUMMER SESSIONS

May 10-28	Term I
June 14-July 16	Term II
July 19-Aug. 20	Term III

CALENDAR

1976-77

FALL SEMESTER

August 30–September 1	Faculty Meetings & Orientation
September 1	Registration
September 2	Classes begin 8 a.m.
September 6	Labor Day, no classes
October 15	Reading Day
October 22	Mid-term
November 24	Thanksgiving recess begins 10 p.m.
November 29	Classes resume 8 a.m.
December 15	Classes end 5 p.m.
December 16	Reading Day
December 17–22	Final exams

SPRING SEMESTER

January 5–7	In-service programs
January 10	Registration
January 11	Classes begin 8 a.m.
February 28	Mid-term
March 4	Spring recess begins 5 p.m.
March 14	Classes resume 8 a.m.
April 8	Easter recess begins 5 p.m.
April 13	Classes resume 8 a.m.
April 27	Classes end 10 p.m.
April 28	Reading Day
April 29–May 4	Final Exams
May 8	Commencement

SUMMER SESSIONS

May 9–27	Term I
June 13–July 15	Term II
July 18–August 19	Term III

Statement of Purpose

The purpose of Elizabethtown College is personal.

To be personal is to become ever freer of one's limitations. Elizabethtown College seeks to aid the student in further developing competent and constructive habits of thought, a desire and capacity to know, clear and coherent means of self-expression, and a growing understanding of himself and the world around him—natural, social and cultural.

To be personal is to have a sense of values. The College accepts and promotes among the members of its academic community and values, attitudes, and motives which are historically associated with the Christian faith. It recognizes each person as a moral being for whom life has meaning and destiny. It believes that without a sense of moral responsibility, the educated person can serve inhuman and degrading purposes as easily as he can serve human and redemptive purposes.

To be personal is to have a sense of social responsibility. Elizabethtown College expects each member of the academic community to face the basic issues of his personhood, to be involved in a creative and orderly relationship with others in the academic community, and to pursue excellence in a climate of responsible freedom. The College, in keeping with its historic motto, advocates the ideal of service to society in personal and professional pursuits.

The College— An Overview

An Introduction—Elizabethtown College is a private, coeducational, church-related institution offering a variety of major field studies leading to the Bachelor of Arts or Bachelor of Science degree.

The curriculum includes a number of career-oriented programs in business, education, health care, and social work. In addition, majors are offered in the traditional arts and sciences.

The fulltime student enrollment is fairly equally divided between men and women, most of whom (about 80 per cent) are resident students.

Beyond its program of traditional education, the College offers a broad range of studies through its Center for Community Education.

History—The College was founded in 1899 by members of the Church of the Brethren. It was established, according to the Charter, “to give such harmonious development to the physical, mental, and spiritual powers of both sexes as will best fit them for the duties of life and promote their spiritual interests.”

Formal accreditation was granted in 1921 by the Commonwealth of Pennsylvania and in 1948 by the Middle States Association of Colleges and Secondary Schools.

The College began to grow rapidly after World War II. Enrollment has more than quadrupled since 1946. An aggressive building program led to the expansion of campus facilities to support a growing and diversified academic program.

Elizabethtown College holds membership in the

Association of American Colleges and the Middle States Association of Colleges and Secondary Schools and is approved by the American Association of University Women, the New York Board of Regents, the American Chemical Society, and the National Association of Schools of Music.

Location—The College is situated in Elizabethtown, a residential community of approximately 8,000, in Lancaster County, Pennsylvania. The surrounding area features a blending of productive agriculture and industry. Folklore and history abound in the region, which is the home of the famed Pennsylvania Dutch.

Access to Elizabethtown is available by the Penn Central Railroad and major highways (take Harrisburg-East exit from the Pennsylvania Turnpike). The Harrisburg International Airport is eight miles from the campus.

Life on the Campus

Elizabethtown College believes that a student's years on campus should be remembered as a total, unified experience complete with a sense of personal achievement and development.

For this reason the basic philosophy of life on the Elizabethtown College campus seeks to bring about cohesion among academic endeavors and activities outside the classroom.

Life in the residence hall, the dining room, the student center, and the gymnasium is not set apart from the student's work in the classroom, laboratory, or library. All aspects of campus life are inter-

related and are viewed as integral parts of the educational process.

By blending his own personality with this educational setting, the student is expected to develop a sense of social responsibility, a concern for the welfare of others, and a deep sense of personal integrity.

The College is as concerned for the cultivation of character and wisdom as it is for the mastery of certain facts and skills.

To round out campus life, Elizabethtown offers a wide variety of student activities and services, including campus government, clubs, recreation and athletics, student health services, counseling services, student publications and communications, religious activities, and others.

Elizabethtown College supports the statutes of the Commonwealth of Pennsylvania controlling the possession and use of alcoholic beverages; it also supports the local, state and federal laws which make the possession, distribution and use of certain drugs illegal. Moreover, it is contrary to the policy of Elizabethtown College for students to purchase, possess (store), and/or consume alcoholic beverages and/or illegal drugs while under College jurisdiction. College jurisdiction includes any social, athletic, or educational activities on- or off-campus sponsored by or related to the College.

Student Records

Elizabethtown College enthusiastically complies with the provisions set forth in both the Family Educational Rights and Privacy Act of 1974 and in House Joint Resolution 40. The guidelines set forth and followed by Elizabethtown College are explicitly stated in the Student Handbook under the heading of STUDENT RECORDS.

The Campus

Students at Elizabethtown College live and learn on a 110-acre campus distinguished by the quiet, natural beauty of its buildings, a broad tree-lined dell, a lake, and a terraced complex of athletic fields.

Major buildings feature a modern colonial style of architecture with brick construction. All are new or totally renovated since 1957.

Principal buildings on the campus:

Academic and Administrative Facilities

Alpha Hall—the administrative center, housing the offices of the President, Dean of the Faculty, Treasurer, Director of Public Affairs, Director of Admissions, Registrar, Business Manager, and Director of Financial Aid.

Nicarry Hall—dedicated in 1973, a modern academic building containing classrooms, offices, the College's computer operation, and specialized facilities for the Departments of Business, Education, Political Science, and Sociology.

Esbenshade Hall—a general purpose classroom building with laboratories for physics, biology, psychology, and occupational therapy.

Rider Hall—houses the Department of Music with offices, practice rooms, and a recital hall.

Zug Memorial Library—features open stack areas for research, large reading rooms, small study rooms, and a music audition room. Library holdings include 107,000 volumes and numerous periodicals, records, and microfilm materials.

Fairview Hall—contains the Center for the Humanities with offices and seminar rooms for the Departments of English, History, and Religion/Philosophy, and Modern Languages.

Gibble Science Hall—houses laboratories for chemistry and general classrooms.

Campus Residences

All campus residences feature double occupancy rooms, attractive lobby areas, laundry facilities, and areas for study and recreation.

Founders Residence—completed in 1971, houses 328 men and women in four separate living areas (Beahm, Falkenstein, Hertzler, Zeigler Houses). Small group living suites are featured.

Schlosser Residence—houses 206 women, features small group suites with carpeting and air conditioning throughout, built in 1965.

Elizabeth Myer Residence—completed in 1957, houses 130 women and contains campus dining room.

B. Mary Royer Residence—dedicated in 1962, houses 133 women.

H. K. Ober Residence—houses 247 men in two wings, built in 1960.

D. E. and Sadie M. Brinser Residence—houses 144 men, dedicated in 1965.

Auxiliary Facilities

Alumni Physical Education Building—dedicated in 1970, features the Troy and Elsie Thompson Gymnasium with seating for 3,000, two classrooms, offices, and special facilities for physical education.

Baughner Student Center—includes student lounges, snack bar, post office, game room, swimming pool,



bowling alleys, the Counseling Center, and student communications center with radio station and newspaper and yearbook offices.

Entering the College

Interested students are urged to take a close look at Elizabethtown's varied academic offerings, its educational philosophy, and its physical facilities. Visits to campus are encouraged and may be arranged through the Office of Admissions.

Elizabethtown College seeks serious students who intend to apply themselves to the educational process. Students are admitted without reference to race, color, creed, sex, or national origin.

The College reserves the right to admit students on a selective basis in order to maintain departments and majors of an effective size.

Students may be admitted under four different plans.

A. REGULAR ADMISSIONS PLAN

Young men and women who are high school graduates will be welcomed for admission to Elizabethtown College. Their records should indicate good character, serious scholarship, and satisfactory health in order that they might do acceptable college work.

Guiding principles used as applications are evaluated suggest:

1. That the student be a graduate of a senior high school accredited by the regional accrediting agency or by the Department of Education of the state in which he lives.
2. That he be recommended by his high school principal and/or guidance counselor both in regard to academic ability and character qualifications.

3. That he complete a College Preparatory course. If a student has not completed such a course but is deemed, through test scores or other means of evaluating his potential, qualified for entrance, he may be admitted.
4. That he take the American College Test or the Scholastic Aptitude Test. Students not completing the American College Test prior to admission will be requested to do so before registering.
5. That he appear for an on-campus interview.
6. That he provide a physician's statement on a form provided by the College.

Advanced Placement Program (CEEB)

Elizabethtown College participates in the Advanced Placement Program of the College Entrance Examination Board. With the approval of the department concerned and the Dean of the Faculty, advanced placement and credit are granted to students who perform satisfactorily in college-level courses and on the Advanced Placement Examination.

B. EARLY ADMISSIONS PLAN

In a sincere effort to provide an opportunity for academic acceleration by superior students, Elizabethtown College has initiated a program under which carefully selected students may begin their higher education immediately after completing the junior year in high school.

Students enrolled under this program become full-fledged freshmen at the College and, upon successful completion of the freshman year, are granted a high school diploma in addition to the college credits earned. This program has the full cooperation and

support of the Pennsylvania Department of Education.

All degree programs at the College are available to these selected students, who are expected to exhibit the mental and emotional maturity necessary to adjust to the general program of the College. Following enrollment, students receive close academic guidance by selected faculty members.

All applicants for the accelerated admission program are carefully screened on a highly individualized basis. Particular attention is given to the following personality factors: mental ability, scholastic achievement, social and physical maturity, and personal motivation.

To be accepted, students must have completed the eleventh year in an accredited high school program and rank in the upper percentiles of their high school class.

Test results are given weighty consideration.

The opinions and predictions of the student's high school principal and guidance counselor are of prime importance, as are those of the College's department head in the particular discipline elected by the applicant.

The written approval of the student's parents, high school principal, and guidance counselor is mandatory before the student can be accepted.

In addition to the indicated statistical data, the selection process includes a conference with the student by the Director of Admissions in the presence of parents, principal and guidance counselor.

Any student interested in applying for his accelerated program should first discuss the matter thoroughly with the high school guidance counselor and then write to the Director of Admissions at Elizabethtown College for an application form.

C. COLLEGE ADMISSION PLAN

Elizabethtown College welcomes students who have been enrolled in other colleges and who find enrolling at Elizabethtown to be of value to their educational objectives. Students who, at the time of matriculation, are graduates of a degree granting, two-year college accredited by one of the six regional accrediting agencies will receive full Junior standing and will be required to earn a minimum of 64 semester hours for graduation by the College.

Students who do not have a degree may transfer a maximum of 64 hours of credit from an accredited two-year college.

College credits not transferred as a part of a degree program and obtained with a grade of C or P or better from other accredited institutions and acceptable toward a degree at Elizabethtown College, may be transferred upon the approval of the Registrar. In any doubtful situations, the Registrar will consult with the Department Chairman and/or the Dean. Grades are not transferable. Courses, however, may be transferred.

In addition to the six principles listed under the Regular Admission Plan, the student will need to present an official transcript indicating work completed at, and honorable dismissal from any and all colleges attended. The College will request recommendations from the personnel deans of the college last attended. Students from non-accredited institutions should see the special admissions plan listed below.

D. SPECIAL ADMISSIONS PLAN

1. Transfer students from non-accredited colleges:

Students may wish to enroll at Elizabethtown who have attended a non-ac-

credited institution. In those cases in which the record is above average, the College may allow a student to validate this non-accredited work by passing more advanced courses at Elizabethtown. In such cases, Elizabethtown reserves the right to revise the evaluation after the equivalent of one semester work at Elizabethtown College. Such students may also validate credit by passing the College Level Examination Program Tests upon the approval of the department concerned and the Dean of the Faculty.

2. Continuing Education for mature adults:
Many adults have continued a broad reading program as well as having had other valid learning experiences. Credit for that which they have learned in these less formal ways is available through testing. Elizabethtown College accepts up to two years of college credit from the College Level Examination Program Tests.

In some instances, mature adults are able to benefit from a college experience but lack the formal education to enter college under one of the three plans listed above. In those cases in which successful work or other experience indicates such strength, a student may be admitted as a special student on a trial basis.

In all special admissions cases, as many of the principles listed under the Regular Admission plan as possible will be followed. Full admission may be granted after completion of 15 hours of work with grades "C" or better.



FINANCIAL AID FOR STUDENTS

In general, student aid packages include three types of aid: Non-repayable grants or scholarships, low-interest educational loans, and part-time employment. These aids come from state and federal government programs, industry and other agencies in the private sector such as churches, fraternal and service clubs, and from college-based aid programs. Students and parents should explore all possible sources of aid. The College Financial Aid Office and local high school counselors are sources of information about various programs.

GRANTS AND SCHOLARSHIPS

Students seeking aid from Elizabethtown College are expected to apply for the Basic Educational Opportunity Grant Program of the federal government and for their state grant program if one exists in their state. Residents of Pennsylvania will apply to the Pennsylvania Higher Education Assistance Agency in Harrisburg for the Pennsylvania Grant Program. Most Pennsylvania high school seniors receive applications by mail from the PHEAA Program.

Elizabethtown College offers Academic Scholarships to a limited number of students each year.



Minimum requirements include ranking in the top ten percent of one's high school graduating class and achieving a combination score of 1000 in the SAT or 22 in the ACT College Admissions Testing Program. Scholarships are renewed upon maintenance of a stated grade point average.

Grants are available on a competitive basis for students showing special leadership or talent and demonstrating financial need. Special programs are available for Minority-Group students and athletes.

Students with exceptional financial need may apply to the College for aid under the Supplemental Educational Opportunity Grant Program, one of the institutional-based federal programs.

Students having a brother or sister as a full-time student at Elizabethtown College will receive a \$250 Sibling Grant each year.

The College has the following restricted grants and scholarships:

RUTH ESHLEMAN ALTHOUSE SCHOLARSHIP—given annually to a student who has completed at least two years in a curriculum leading toward teaching on the elementary or secondary level, recognizes scholarship, interest and creativity in preparation for a teaching career. The late Mrs. Althouse was a 1936 graduate of Elizabethtown College.

THE BLACK SCHOLARSHIP FUND—established by faculty and administrators of the College, provides a full tuition scholarship for a black student.

THE HERMAN G. ENTERLINE SCHOLARSHIP—is given each year to a student in Business Education in memory of the late Dr. Enterline, a 1931 Elizabethtown graduate.

ELMER L. AND FRANCES E. ESBENSHADE SCHOLARSHIP AID FUND—provides grants to Lancaster County students from the income of a trust fund established by Mr. Esbenshade.

THE ELIZABETHTOWN KIWANIS CLUB SCHOLARSHIP—is given annually to one or more students from the Elizabethtown Area School District and may provide up to one-half of full tuition cost.

THE SLAYMAKER LOCK COMPANY—has provided the equivalent of one full tuition scholarship the last several years with preference to be given to children of Slaymaker employees.

BETHANY BRETHREN HOSPITAL HEALING ARTS SCHOLARSHIP—provides \$500 each year to an Elizabethtown student preparing for a career in one of the healing arts. Preference is given to qualified members of the Church of the Brethren.

THE GREYHOUND CORPORATION—has provided a \$1000 scholarship each year recently to an Elizabethtown freshman. Armour-Dial, Inc., a Greyhound subsidiary, has renewed the grant for the student's second year. These are designed to serve members of Minority Groups.

THE NATIONAL CENTRAL BANK WORK-SCHOLARSHIP PROGRAM—provides up to \$1000 per year for a student from the bank's Harrisburg area and couples this with summer and school-time employment in the bank's various departments. The program provides one new scholarship each year to a student in a business-related major.

ELIZABETHTOWN COLLEGE—sponsors one scholarship each year to an entering freshman through the National Merit Corporation's scholarship program. This four-year scholarship provides a maximum of \$1500 per year depending upon the financial need of the student.

MARY SACHS SCHOLARSHIP FUND—The Mary Sachs Scholarship Fund has been established to honor the memory of Mary Sachs, merchant, humanitarian, and civic leader. The income from the Fund is granted each year to one or more outstanding students having financial need, preferably preparing for a career in the field of business.

PENNSYLVANIA DUTCH DAYS SCHOLARSHIP—The Pennsylvania Dutch Days Committee, Hershey, has established a scholarship fund for underwriting a research project on Pennsylvania Dutch language or culture, or for providing financial aid to a student in need.

LOANS

Students with financial need may borrow up to a maximum of \$1000 per year under the National Direct Student Loan Program. Such loans are interest-free until nine months after separation from the college at which time interest at three per cent per year begins.

The Guaranteed Student Loan Program makes available to students as much as \$2000 per year to a maximum of \$7500 for undergraduate study. Local banks and other lending institutions make these loans at seven per cent annual interest rate. An agency of each state acts as the guaranty agent and also approves the loans. A separate federal interest subsidy

pays the interest during the college years for students whose adjusted family income is less than \$15,000 (for a family of four this is a gross income of \$20,000) or who demonstrate financial need.

WORK

The College provides employment through the federal College Work-Study Program as well as from College funds. Students may work a maximum of 15 hours per week on campus though most jobs provide fewer hours.

A number of off-campus opportunities for part-time employment are listed each year by the College Placement Office.

GENERAL

Students should refer to the annual information brochure on Financial Aid Programs for more complete information and instructions. Applications for the college-based programs must be received by the Financial Aid Office no later than March 1, in order to be assured of consideration for aid. The deadline for applications for an Academic Scholarship is February 1.

The College uses the Parents' Confidential Statement of the College Scholarship Service to evaluate the financial need of each applicant.

In general, students must register as full-time students to qualify for aid. Students taking at least a half-time load may be able to qualify for some of the federal programs. Each student must maintain the academic and citizenship requirements of the College to retain his financial aid.

Inquiries regarding financial aid should be directed to the Financial Aid Office, Alpha Hall, Elizabethtown College, Elizabethtown, Pennsylvania. 17022.



The Academic Program

A student attending Elizabethtown College will find that the academic program is structured to help each person attain a broad general understanding as well as depth of knowledge in a chosen field. The broad general understanding is achieved through the General Education program, which is common to all students wishing to achieve a particular degree. Depth in a chosen field is achieved through the major.

The curriculum of the typical student will include (1) the General Education core, which is common to all students enrolled in a particular degree program, (2) a departmental or interdisciplinary major as specified by the departments in which the major is elected by the students, and (3) elective courses. Some students may elect an area of concentration.

Each student should plan carefully the total college experience in order to achieve the greatest possible good from the many opportunities Elizabethtown offers him.

The College reserves the right to limit the

number of courses and sections of courses to be offered in any semester or session.

GENERAL EDUCATION

Care has been taken to allow for considerable choice within General Education. The student should select with understanding to strengthen his total college experience. It is recommended that a student select a program of courses that would lead to focusing upon a theme or idea related to his interests and/or professional aspirations. For example, a student might elect to complete a concentration of courses and fulfill the general education requirements simultaneously. For suggested areas of concentrations outside the major, see the departmental listings for course sequences and descriptions.

Alternatives to the General Education program or deviations from the established program must be approved by the Academic Standards Committee.

Course	B.A. hours	B.S. hours	
Literature	6	6	Each student should achieve minimum English competency before taking En 105. Students should elect En 105 and one other course in English or American Literature.
Modern Language	6		Each student for the B.A. must achieve competency equal to Language 202. For a student with two to three years of high school language this will normally mean six hours of second year college language. Credit will not be granted for the 101–102 level of a language if two or more years of the same language were completed in high school. Credit will be granted for 101–102 if the student begins a new language in college.
Fine Arts	3	3	May be fulfilled by any Art course, any Theatre course (Com 151, 152, 251, 252, 265, 352, 354) or the following Music courses: Mu 101, 111, 112, 212, 315, 335, 415, 417, and credit in applied music and ensembles.

Religion and Philosophy	6	6	Select two of the following courses: Rel 105, 115, 125, 205, 215, or either of these two sequence studies: Rel 105 and Rel 355, or Rel 125 and Rel 321; any two courses in Philosophy with the exception of PH 481-490.
History	6	6	Select Hi 105 and one other history course.
Social Science	9	9	Select three courses from among Economics, Political Science, Psychology, Anthropology, or Sociology.
Mathematics or Logic	3		Ma 001 credit is not applicable to the General Education requirement.
Mathematics		6	
Natural Science	8	8	Select from Biology, Chemistry, Earth Science or Physics, two courses in one science or one course in Physics and one in Earth Science.
Physical Education	4	4	Four activity courses must be chosen, at least one of which, and not more than two, must be aquatics.
Electives	12	12	Selected courses to strengthen the overall general educational program according to the student's individual need.

DEPARTMENTAL MAJORS AND AREAS OF CONCENTRATION

Each student should select a major which is a study in depth. It is not necessary in most cases for a new college student to make this decision immediately, but careful consideration is important. Those who have serious questions about their major should elect a broad selection of required General Education courses in the freshman year. This will enhance the understanding of various opportunities for majors and allow time for the decision to be made.

The following is an explanation of catalog course descriptions.

Bio 103 INTRODUCTION TO BIOLOGY
1-5-4

Bio 104 GENERAL BIOLOGY 1-5-4

Bio 103 is the course number and designation

and indicates an elementary level course. The number of the course generally reflects the level of instruction rather than the year taken. INTRODUCTION TO BIOLOGY is the course title.

In 1-5-4, the first numeral (1) signifies the number of 50-minute periods of formal class or recitation meetings a week. The second numeral (5) is the number of 50-minute class periods devoted to laboratory per week. The third numeral (4) signifies the total semester hours credit for the course. In many cases programs and methods of teaching vary from semester to semester.

Credits are expressed in semester hours.

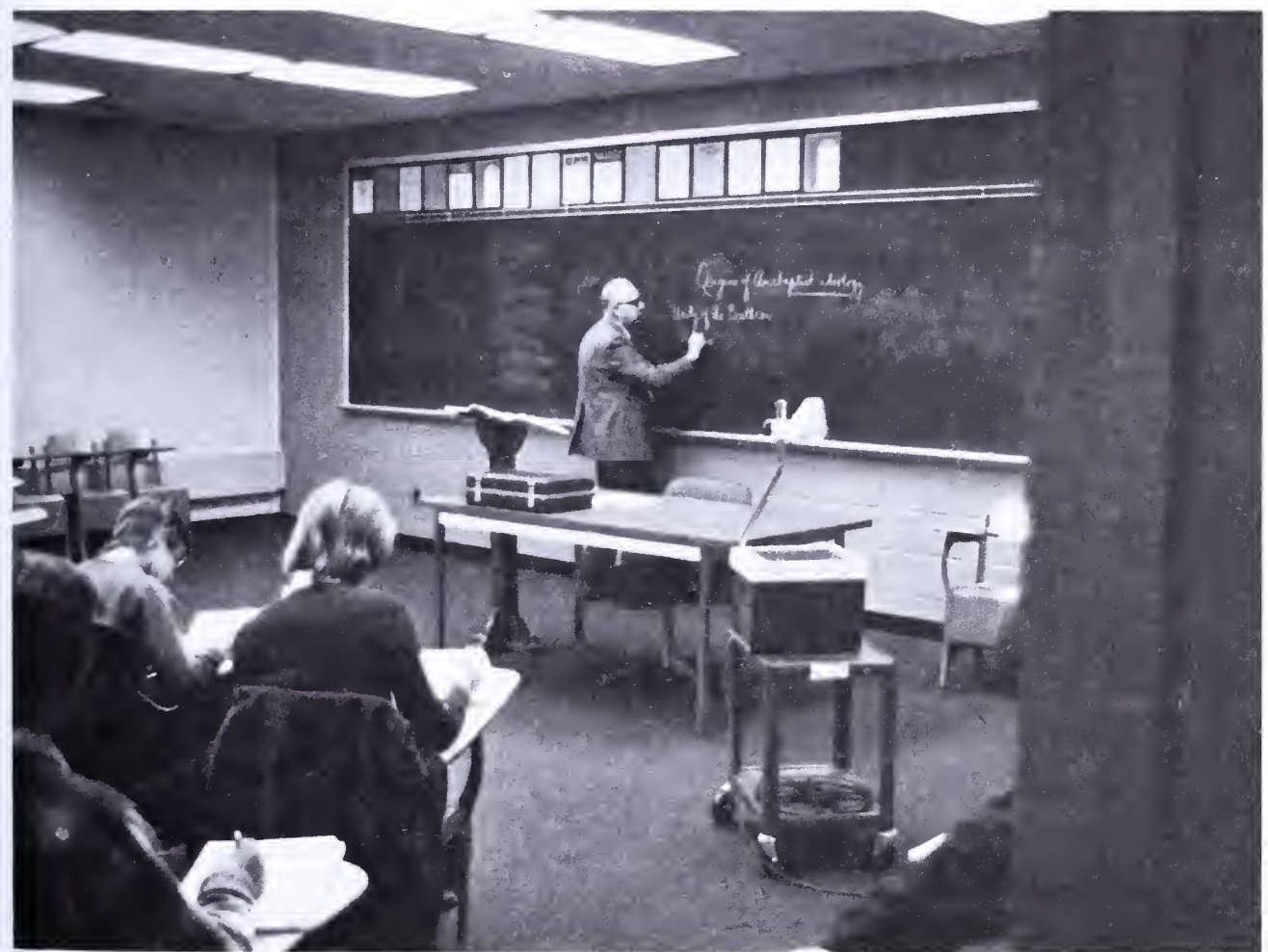
For some courses, prerequisites are necessary. When these are noted, the given course or courses must have been earned prior to registration for the course listed.

For corequisites, a course may have been completed prior to registration for the course in question or it may be taken simultaneously with that course.

P.O.I. means permission of the instructor. Registration for the course may be made only after securing written permission of the instructor listed to teach the course.

In addition to this catalog, the Program Guide Book, issued each year to all new incoming students,

is considered official information. Since the catalog is printed every two years and the Guide Book annually, the latter may contain program and curriculum information which supersedes that in the catalog.



DEPARTMENT OF ART

The academic and the practical courses in the Art program aim to help students refine their creative potential and expand their judgment in visual arts. All studio courses in the two-dimensional and three-dimensional arts are administered by established professional practitioners. No major in art is offered. For education majors proposing to concentrate in art, the department recommends a sequence of courses: Art 211 and 355; and thereafter electives from Art 105, 221, 251, 311, 321, 323, and 324. Physical limitation of class size frequently necessitates instructor's permission for enrolling in a studio course.

COURSE OFFERINGS

Art 105 DRAWING 0-6-3

Studio practice in basic drawing media for sketching and rendering both live and inanimate subjects.

Art 211 DESIGN AND COLOR 0-6-3

Studio easel painting, chiefly in opaque media, with stress on pictorial organization and application of color theories.

Art 221 SCULPTURE 0-6-3

Application of basic sculpture techniques in modeling, carving, and assemblage of various three-dimensional materials. Fall semester only.

Art 251 PRINTMAKING 0-6-3

Executing several methods of both relief and intaglio plates, and instruction in the operation of the printmaker's machinery. Spring semester only.

Art 311 ADVANCED PAINTING 0-6-3

Continuation of Art 211, concentrating on applying design and color skills in executing finished paintings. Art 211 is required, or permission of the instructor.

Art 321 CERAMICS 0-6-3

Direct techniques of potting, including wheel operations, handbuilding, glazing, and firing; and readings in ceramic history and design. Permission of the instructor.

Art 323 WESTERN ARTS 3-0-3

Study in the comparative principles of European-American fine and applied arts as manifest in their aesthetic, generic, and socio-philosophic application. Fall semester only.

Art 324 AMERICAN ARTS 3-0-3

Comprehensive scan of U.S. arts and literature, observing their derivation from social and aesthetic influences. Spring semester only.

Art 355 INTRODUCTION TO ART 3-0-3

Experience with selected works by major and minor artists of the modern epoch, as a means of achieving skill in recognizing and evaluating artistic style.

Art 371-380 SEMINARS IN FINE ARTS Variable credit.

Art 481-490 INDEPENDENT STUDY IN ART Variable Credit.

DEPARTMENT OF BIOLOGY

BACHELOR OF SCIENCE

The curriculum of the Biology Department is designed to acquaint the student with the structural, functional, and environmental aspects of the living world. These objectives are implemented in class, laboratory, field, and individualized instruction. Certain courses are required for broad exposure, however, enough elective time is allowed for students to design individualized programs towards professional, medical, or graduate school education or towards entry into the job market or the teaching profession.

Major Requirements

Required courses for the major are Bio 103, 104, 215, 307, 499, and 13 additional hours in biology including a physiology course and at least one course selected from Bio 204, 205, 207, 209, 217, and 304. Students must also complete Ch 101, 102, 201, 202, and 301, Physics through 211, Math 101 and 121 or Math 117 and 118 as well as a foreign language through the 202 level or through 102 plus Math 151. Ch 301, Bio 499, and language are not required of those completing secondary education requirements.

Secondary General Science Certification

The teaching certificate program in general science with a biology concentration requires: All of the following—Bio 103, 104, 215, 307; one of the following—Bio 204, 205, 206, 207, or 209; and one of the following—Bio 316, 322, or 414.

COURSE OFFERINGS

Bio 103-104 GENERAL BIOLOGY I & II 2-4-4 each

An audiotutorial approach to the study of the unity and diversity of life, cell structure and function, the chemical basis of life and heredity. During the second semester the course deals with invertebrate and vertebrate anatomy, physiology and reproduction; energy relationships, and a survey of the plant kingdom.

Bio 204 PLANT MORPHOLOGY 2-4-4

A detailed study of lower and higher plant structures. Saturday field trips and plant collection required. Prerequisite: Bio 104 (Fall 1975)

Bio 205 MICROBIOLOGY 2-5-4

A detailed study of the morphology, physiology, and identification of bacteria as well as their relationships with their environment. Prerequisite: Bio 104 & Ch 102

Bio 206 TAXONOMY OF VASCULAR PLANTS 2-4-4

A laboratory, field and discussion course concerning the classification of vascular plants with emphasis on taxonomic principles, systems of classification, family characteristics, and relationships. Saturday field trips and plant collection required. Prerequisite: Bio 104 or P.O.I.

Bio 207 INVERTEBRATE ZOOLOGY 2-4-4

A comprehensive study of selected representatives of each of the invertebrate phyla. Saturday field trips and invertebrate collection required. Prerequisite: Bio 104 (Fall 1976)

Bio 209 COMPARATIVE ANATOMY OF VERTEBRATES 2-4-4

A comparative study of morphology of selected chordates considered from an embryological point of view. Laboratories are open in addition to regularly scheduled hours. Prerequisite: Bio 104

Bio 215 GENETICS 3-4-4

A study of Mendelian and molecular genetics. Prerequisite: Bio 104

Bio 217 HUMAN ANATOMY 2-4-4

A study of human structure at the tissue, organ, and system levels. Student enrollment will be limited to occupational therapy and nursing majors. Prerequisite: Bio 104 and P.O.I.

**Bio 253 HISTOLOGY AND BIO-MEDICAL
TECHNIQUE 2-4-4**

A basic microscopic study of vertebrate tissues and routine paraffin sectioning, staining and slide preparation. Special laboratory techniques include histochemistry, electrophoresis, genetics, immunology and hematology. Prerequisite: Bio 104 & Ch 102

Bio 304 DEVELOPMENTAL BIOLOGY 2-4-4

Principles of development covering the aspects of change in cellular morphology to gross morphology are considered. Special emphasis is devoted to control mechanisms. Prerequisite: Bio 215

Bio 307 GENERAL ECOLOGY 3-4-4

The relationships between plants, animals and their environment is studied. Energy flow, mineral cycling, population changes and environmental factors are investigated. Field trips required. Prerequisite: Bio 200 level, Botany and Zoology, or P.O.I.

Bio 314 APPLIED MICROBIOLOGY 2-4-4

A study of microorganisms as they relate to their natural environment, industrial processes, and to public health. Prerequisite: Bio 205 & Ch 201 (Spring 1976)

Bio 316 GENERAL PHYSIOLOGY 3-4-4

A comparative study of vertebrate organs and organ systems considered from a functional point of view. Prerequisite Bio 209 or 253

Bio 318 HUMAN PHYSIOLOGY 3-4-4

A functional study of cells, tissues, organs, and organ systems of man. Student enrollment will be limited to occupational therapy and nursing majors. Prerequisite: Bio 209 or 217 and P.O.I.

Bio 322 PLANT PHYSIOLOGY 3-4-4

A study of plant growth and development, including a discussion of photosynthesis, mineral nutrition, metabolism, water relations and plant hormones. Prerequisite Bio 204 and Ch 202 or P.O.I.

**Bio 371-380 SPECIAL TOPICS IN BIOLOGY
Variable Credit**

Courses of a specialized nature reflecting the interests of the instructor. Courses offered on a random basis.

**Bio 381-390 DIRECTED STUDY IN BIOLOGY TOPICS
Variable Credit**

Directed study in biological areas in which the student meets regularly with the instructor on an individual basis. Lab work may include self-directing aids. P.O.I.

Bio 414 CELL PHYSIOLOGY 1-4-3

A chemical and physical approach to the understanding of cell mechanisms. Much independent work is expected of the student. Prerequisite: Bio 104 & Ch 202 (Spring, 1977)

**Bio 481-490 INDEPENDENT PROBLEMS IN BIOLOGY
Variable Credits**

Designed to allow the student to do independent work and limited research in some phase of biology. [Prerequisite: 16 credits in biology and P.O.I. and Dept. Chairman

Bio 499 SEMINAR IN BIOLOGY 1-0-1

Students will present laboratory or literature research to the group. Topics will vary from year to year. Prerequisite: 18 hours in biology

**Ed 305 PRACTICUM IN SECONDARY EDUCATION:
SCIENCE 3-1-4**

See Education. (Fall 1976)

GS 371 HISTORY OF SCIENCE 1-0-1

Independent readings on historical developments in science. Prerequisite: P.O.I.

PRE-NURSING

The College offers the first two years of a baccalaureate nursing program. After successful completion of the freshman and sophomore years, the student transfers directly to Widener's College of Nursing located at Chester, Pennsylvania, for their Junior and Senior years.

The baccalaureate nursing program is fully accredited by the National League for Nursing.

Persons interested in this program should consult with Dr. Robert Heckman of the Department of Biology.

*Offered upon sufficient demand and availability of staff.

DEPARTMENT OF BUSINESS

BACHELOR OF SCIENCE

The primary objective of the Department of Business is to provide comprehensive programs of professional education for young men and women who wish to achieve responsible positions in private and public business organizations, and in academic institutions. The general objectives are to: (1) prepare contemporary and future leaders, (2) develop a broad understanding of the nature of business and its role in society, (3) enlarge the students' competence in the qualities for success in the business world, and (4) provide the foundation for graduate study, continuing self-education and personal development. The various programs offered in the Business Department are based strongly in the tradition of a liberal arts education.

B.S. with major in Accounting—Preparation for entrance into the profession of accounting (public, private or governmental) requires a basic business core in addition to a proficiency in accounting. The increased emphasis upon computer and quantitative techniques by business necessitates guiding students into electing additional courses in these areas.

B.S. with major in Business Administration—Preparation to become tomorrow's business leader requires a broad background in business, knowledge in the behavioral and social sciences, plus the ability to use quantitative techniques in solving problems. This background and these basic tools will evolve from the business core, the general education core, and specific mathematics requirements. Further understanding in a specific area of business will be gained by the student's choice of one of the six areas of concentration: accounting, computer science, economics, health care management, management or marketing.

B.S. with major in Business Education—The Business Education curriculum provides the students who plan to teach in the business department of a secondary school with liberal training in courses outside the field of business, a broad background in business, depth in at least two certification areas in business, and professional education. The professional training will be conducted by personnel who have been secondary business teachers and maintain an awareness of current developments through close relationships with business departments in area high schools and vocational-technical schools.

B.A. or B.S. with major in Economics—Preparation for a career in economics requires a broad background in basic economic theory coupled with an in-depth study of the quantitative tools so important to today's economist. The economics curriculum is designed to provide the student with this breadth and depth. In light of the increasing emphasis on the quantitative approach to economic theory, students are advised to select courses in mathematics and computer science beyond those specifically required in the economics curriculum.

A.S. with major in Medical Secretarial Science—This two-year program prepares students for employment in a medical or dental office, hospital or other health care facility. The curriculum includes a liberal arts core along with pertinent secretarial skills and a series of Health Care courses. The program is designed to provide the student with a foundation in the behavioral and social sciences, the liberal and fine arts, as well as specific training for the Medical Secretary profession.

B.S. with major in Accounting or Business Administration may be earned in the evening program of the college. For further information see special Evening Session bulletin.

ACCOUNTING

A major in Accounting will include AC 107, AC 108, AC 205-206, AC 305-306, 12 additional semester hours in Accounting, BA 215, BA 248, BA 325, BA 331-332, BA 361 or BA 366, CS 125, EC 101-102, MA 117 (or higher level course), and MA 151. Additional courses in Mathematics and Computer Science are recommended as electives.

BUSINESS ADMINISTRATION

A major in Business Administration will include AC 107, AC 108, BA 215, BA 248, BA 325, BA 331-332, BA 361 or BA 366, CS 125, EC 101-102, MA 117 (or higher level course), and MA 151. Each student must also choose a concentration in one of the following areas: Accounting, Computer Science, Economics, Health Care Management, Management, or Marketing. Twelve

semester hours beyond those listed above must be taken in the concentration area (9 of these 12 hours must be taken on the Elizabethtown College Campus). If the Management concentration is chosen, both BA 361 and BA 336 are required. If the Health Care Management concentration is chosen, the courses for the major are AC 107, AC 108, BA 215, BA 248, BA 325, BA 331, BA 366, CS 125, EC 101-102, MA 117 (or higher level course), MA 151, HC 311, HC 312, HC 321, HC 322, HC 472, PSY 105, an applied psychology course, and two courses chosen from BA 361, BA 467, BA 468, BA 499, CS 302, EC 304.

BUSINESS EDUCATION

A major in Business Education will include AC 107, AC 108, BA 215, BA 331-332, BEd 111, BEd 421, CS 125, EC 101-102, MA 151, PSY 105, and the professional education program for secondary certification. Each student must also choose two or more of the following certification areas: Accounting, Computer Science, Marketing, Secretarial, Typewriting. Speech proficiency is also required.

Business Education majors may receive credit in shorthand and typewriting by examination. This regulation does not apply to BEd 301 and BEd 311. Based on the results of an examination the student may be given credit for either BEd 101 or BEd 201 and will be advised of additional courses needed in shorthand. The same will apply for typewriting with possible credit in BEd 111 or BEd 211.

ECONOMICS

A major in Economics will include EC 101-102, EC 201, EC 301, EC 302, EC 309, 15 additional semester hours in Economics, CS 125, MA 151, MA 121 or MA 117-118, 9 semester hours of history, and 9 semester hours of political science and/or sociology. AC 107-108 are recommended electives.

A student may choose Economics as either a major or minor area in the comprehensive Social Science program. If the student desires secondary certification the major area includes EC 101-102 and 18 additional semester hours in Economics; the minor area includes EC 101-102 and 6 additional semester hours in Economics. If the student does not desire secondary certification, the major area includes EC 101-102, EC 301, EC 302, and 12 additional semester hours in Economics; the 15 hour minor area includes EC 101-102, EC 301, or EC 302, and 6 additional semester hours in Economics; the 3 hour minor area in EC 101.

MEDICAL SECRETARIAL SCIENCE

The requirements for the associate degree in Medical Secretarial Science will include BEd 211, BEd 221, BEd 223, HC 101, HC 109, HC 211, HC 219, HC 272, CH 101-104, COM 105, EN 105, PSY 105, 2 semester hours in Physical Education, and 3 semester hours in each of the following areas: Fine Arts, History, Religion/Philosophy, and Sociology.

AREA OF CONCENTRATION FOR ELEMENTARY EDUCATION MAJORS

The 18-semester hour area of concentration for an Elementary Education major may be completed in the area of Business Administration or Economics. If Business Administration is chosen the requirements are AC 107, BA 361 or BA 467, CS 125, EC 101-102, and 1 additional 3-semester hour course in Accounting, Business Administration or Computer Science. If Economics is chosen the requirements are EC 101-102, CS 125, and 3 additional 3-semester hour courses in Economics.

COURSE OFFERINGS

ACCOUNTING

Ac 107 FINANCIAL ACCOUNTING 3-0-3

An introductory course designed to acquaint the student with the basic accounting methodology and the structure and interpretation of financial statements used in external reporting.

Ac 108 MANAGERIAL ACCOUNTING 3-0-3

Uses the information gathered from accounting records and other information sources to prepare internal reports and analyses to assist management in control and decision making. Prerequisite: Ac 107.

Ac 205-206 INTERMEDIATE ACCOUNTING 3-0-3 Each

A thorough study of the various accounting concepts and generally accepted accounting principles; theories on income de-

termination; the presentation of statements of financial position, results of operations, and the changes in financial position. Prerequisite: Ac 108.

Ac 301 INTRODUCTION TO FEDERAL INCOME TAXES 3-0-3

A study of the provisions of the Internal Revenue Code applicable to individual taxpayers. Students without a business background are encouraged to enroll.

Ac 302 ADVANCED TAX ACCOUNTING 3-0-3

Further study of the Internal Revenue Code as it relates to partnerships, corporations, trusts and estates and exempt organizations. State taxation of business is also covered. Prerequisites: Ac 205; Ac 301.

Ac 305 COST ACCOUNTING 3-0-3

A study of the quantitative aspects of managerial cost accounting, including cost-volume-profit analysis, budgeting, standard costs, and the concept of relevant costs. Prerequisite: Ac 108 or P.O.I.

Ac 306 ADVANCED COST ACCOUNTING 3-0-3

A continuation of the managerial emphasis on cost accounting including capital budgeting, inventory control, joint-and-by-product costing, and process cost accounting. Prerequisite: Ac 305.

Ac 370-379 SPECIAL PROBLEMS 3-0-3

A course designed to allow students to explore topics and problems of current relevance in accounting.

Ac 405 AUDITING 3-0-3

A study of the legal and ethical responsibilities of an auditor, the methods and procedures used in gathering evidential material, and the auditor's report. Prerequisite: Ac 206.

Ac 406 ADVANCED ACCOUNTING 3-0-3

A detailed study of various accounting topics, including, consolidations, partnerships, estates and trusts, consignments, and price-level financial reporting. Prerequisite: Ac 206.

Ac 409 CONTEMPORARY PROBLEMS FOR C.P.A.'s 3-0-3

A capstone course in accounting designed to assimilate the widely varying aspects of public accounting and update the student in the latest standards and problems. Prerequisites: Ac 302; 306; 405; 406; or P.O.I.

Ac 471 INTERNSHIP IN ACCOUNTING Variable Credit

A series of work experiences in accounting with either a public accounting firm, a business firm, or governmental agency. Prerequisite: Approval of Department Chairman.

Ac 480-489 INDEPENDENT STUDY Variable Credit

Designed to allow the student to do independent study and research on a problem or topic in the field of accounting. Prerequisite: Approval of Department Chairman and Dean of the Faculty.

Ac 499 SEMINAR IN ACCOUNTING 3-0-3

A study of selected topics currently under discussion in the accounting field. A major research project will be required. Prerequisite: P.O.I.

BUSINESS ADMINISTRATION

BA 215 PRINCIPLES OF MARKETING 3-0-3

Involves strategies employed in marketing; describes the distribution function; analyzes basic marketing functions; describes government's role in marketing; and studies social responsibility.

BA 248 QUANTITATIVE TECHNIQUES FOR BUSINESS 3-0-3

Designed to develop familiarity with statistical and mathematical methods applicable to business. Includes: break-even analysis, Bernoulli and Bayesian probability, inventory models, and linear programming. Prerequisites: MA 151; MA 117.

BA 312 PRINCIPLES OF ADVERTISING 3-0-3

Involves the creative and business management aspects of advertising including campaign strategy, mass media, the advertising

agency, creative techniques, advertising research, and social accountability.

BA 313 RETAILING MANAGEMENT 3-0-3

A study of retailing institutions including institutional location, layout, managerial objectives and policies, consumer behavior, pricing and promotional strategies, consumer services, and expected trends. Prerequisite: BA 215.

BA 316 MARKETING MANAGEMENT 3-0-3

Entails the formulation of overall marketing policies and synthesizes planning techniques for embodying these policies in marketing programs. Case analysis is stressed. Prerequisite: BA 215.

BA 325 BUSINESS FINANCE 3-0-3

Analyzes the management of funds of a business. Includes: long and short-term sources of funds, capital budgeting, cash budgeting, ratio analysis, and capital markets. Prerequisite: Ac 108.

BA 331-332 BUSINESS LAW I AND II 3-0-3 Each

The study of legal principles applicable to business. Emphasis is placed upon contract law in the first semester. The second semester continues the study of legal principles in relation to business with emphasis upon partnership, corporation and property law.

BA 361 BEHAVIORAL THEORY IN MANAGEMENT 2-2-3

The course provides detailed examination of basic motivational theories, examination of behavioral models based on these theories, and the practical application of these models. Prerequisite: PSY 105 (one additional 3-credit course in Psychology is desirable) (Spring only).

BA 366 ORGANIZATION THEORY AND DECISION-MAKING 2-2-3

The course combines the functional, system, and quantitative approaches to the study of the subject. Laboratory sessions will comprise a comprehensive review and examination of quantitative methods. Prerequisites: Ac 108; BA 248; Ec 102 (Fall only).

BA 370-379 SPECIAL PROBLEMS 3-0-3

A course designed to allow students to explore topics and problems of current relevance in business.

BA 411 PRINCIPLES OF MARKETING RESEARCH 3-0-3

Employs scientific research methodology to solve marketing problems. Covers research design, data collection, sampling, and analysis. Stresses writing meaningful reports for management use. Prerequisites: BA 215; MA 151.

BA 424 INVESTMENTS 3-0-3

Emphasis placed on various classes of investments available to the investor; sources and uses of investment information and security and market evaluation. Prerequisite: BA 325 or P.O.I.

BA 466 PRODUCTION MANAGEMENT 3-0-3

A critical study of decision-making techniques, emphasizing practical application of scientific methods to production activities. Includes resource allocation, production cycle, work simplification, plant layout and process control. Prerequisites: Ac 108; BA 366; Ec 102.

BA 467 PERSONNEL ADMINISTRATION 3-0-3

Analysis of the principles, concepts and theories concerned in the selection, training and maintenance of a work force. Laboratory sessions will be concerned with real-life problems.

BA 468 INDUSTRIAL AND LABOR RELATIONS 3-0-3

Analysis of labor economic theory, employment relationships, union philosophy, structure and function, collective bargaining and the interrelated interests of management, union, workers and the community.

BA 480-489 INDEPENDENT STUDY Variable Credit

Designed to allow the student to do independent study and research on a problem or topic in the field of business. Prerequisite: Approval of Department Chairman and Dean of the Faculty.

BA 498 SEMINAR IN MARKETING 3-0-3

Surveys the literature in consumer behavior, quantitative methods in marketing, and marketing and public policy. Ties together all areas of marketing. Prerequisites: BA 215 and P.O.I.

BA 499 SEMINAR IN MANAGEMENT 3-0-3

Advanced study focusing on current management concepts and contemporary problems in the business enterprise. Various topics will be selected in the area of the students' interest. Prerequisite: P.O.I.

BUSINESS EDUCATION**BEd 101 ELEMENTARY GREGG SHORTHAND 3-0-3**

The Individual Progress Method (IPM/1), utilizing workbooks and tapes, provides an intensive study of Gregg Shorthand theory. (For students with no training in Gregg Shorthand.)

BEd 111 ELEMENTARY TYPEWRITING 2-2-2

Fundamental typewriting techniques: machine operation, keyboard technique, letter forms, tabulation, manuscript form. (For students with no formal training on the typewriter.)

BEd 201 INTERMEDIATE GREGG SHORTHAND 3-0-3

The Individual Progress Method (IPM/2), through the use of workbooks and tapes, concentrates on speed development and the production of mailable transcripts. Prerequisites: BEd 101; BEd 111; or P.O.I.

BEd 211 INTERMEDIATE TYPEWRITING 3-0-3

A concentrated training on the typewriter; business letters, special communication forms, technical papers, business reports, tables, business forms, executive communications and application forms. Prerequisite: BEd 111 or P.O.I.

BEd 221 MATHEMATICS FOR BUSINESS 3-0-3

Review of fundamental processes, with emphasis on accuracy and speed in computations. These skills are applied to problem solving in personal and business situations. (Enrollment limited to Business Education and Medical secretarial students.)

BEd 223 BUSINESS COMMUNICATIONS 3-0-3

Emphasis is on effective and functional written and oral business communications. (Enrollment limited to Business Education and Medical Secretarial students.)

BEd 301 ADVANCED GREGG SHORTHAND 3-0-3

A thorough review of shorthand theory, dictation and transcription practices. Emphasis given to methods and materials used in teaching shorthand in the secondary school. Prerequisite: BEd 201 or P.O.I. (Enrollment limited to Business Education students.)

BEd 311 ADVANCED TYPEWRITING 3-0-3

The building of production-level skill with emphasis given to methods and materials used in teaching typewriting in the secondary school. Prerequisite: BEd 211 or P.O.I. (Enrollment limited to Business Education students.)

BEd 370-379 SPECIAL PROBLEMS 3-0-3

A directed learning experience designed to allow students to explore current topics of special relevance in the field of business education.

BEd 421 OFFICE PRACTICE 3-0-3

The study of methods and materials for teaching secretarial procedures and business machines. Prerequisite: BEd 111 or P.O.I. (Enrollment limited to Business Education students.) (Fall only)

BEd 480-489 INDEPENDENT STUDY Variable Credit

Designed to allow the student to do independent study and research on a problem or topic in the field of business education. Prerequisite: Approval of Department Chairman and Dean of the Faculty.

**Ed 305 PRACTICUM IN SECONDARY EDUCATION:
BUSINESS 4 Credits**

A thorough consideration of the methods of teaching basic business subjects in secondary schools including the selection and adaptation of curriculum materials. (Enrollment limited to Business Education students.) (Also see Department of Education, ED 305. (Spring only) (Co-Requisite: Ed 306)

**Ed 472 PROFESSIONAL INTERNSHIP,
SECONDARY 16 Credits**

(See Department of Education, ED 472.)

COMPUTER SCIENCE

**CS 103 TIMESHARING CONCEPTS (5 week course)
3-0-1**

Introduction to the timesharing use of computer systems and to system components. Included is a study of text editors for creating and editing user files.

**CS 105 FORTRAN PROGRAMMING (5 week course)
3-0-1**

An introduction to the FORTRAN (FORMula TRANslation) language, statements, and features with emphasis on its use in algorithmic problem-solving. Prerequisite: CS 103.

CS 107 BASIC PROGRAMMING (5 week course) 3-0-1

Course content introduces the student to language concepts necessary to write simple programs in Beginners' All-purpose Symbolic Instruction Code, a language suited for timesharing.

**CS 115 PRINCIPLES OF UNIT RECORD
PROCESSING (5 week course) 3-0-1**

A study of data processing utilizing unit record equipment. Various types of equipment will be discussed with emphasis placed on the key-punch and sorter.

**CS 125 INTRODUCTION TO COMPUTER
PROCESSING 3-0-3**

An overview of computers in our society, including history, components, logic, and uses of computers. A thorough study of BASIC programming concepts is presented. (Students who passed CS 107 will be given only 2 credits.)

CS 215 COBOL PROGRAMMING 3-0-3

A study of a high-level, problem-oriented language, COBOL (COMmon Business Oriented Language). Emphasis is placed on the use of the language by writing several programs. Prerequisites: CS 103; CS 125.

CS 302 SYSTEMS ANALYSIS AND DESIGN 3-0-3

An analysis and design of computer-based information systems. The analysis will include a study of information requirements, design approaches, processing methods, and data management systems. Prerequisite: CS 125.

**CS 315 PROGRAMMING BUSINESS APPLICATIONS
3-0-3**

An advanced study of COBOL features including ISAM, Report Writer, and SORT. Several programming assignments illustrate the sophisticated use of the language in the business environment. Prerequisites: CS 215; CS 302; or P.O.I.

CS 370-379 SPECIAL PROBLEMS 3-0-3

A course designed to allow students to explore topics and problems of current relevance in computer science. Prerequisite: P.O.I.

**CS 401 COMPUTERS IN SIMULATION AND
MODELING 3-0-3**

Applications of specific quantitative modeling techniques to various business and social problems. Emphasis is placed on programming and simulating decisions and control criteria. Prerequisites: CS 125; BA 248; MA 151; or P.O.I.

**CS 471 INTERNSHIP IN COMPUTER SCIENCE
Variable Credit**

Work experiences designed to supplement course work with real-world applications. By working for business, school, or government, the student gains valuable knowledge unavailable from textbooks. Prerequisite: Approval of Department Chairman.

CS 480-489 INDEPENDENT STUDY Variable Credit

Designed to allow the student to do independent study and research on a problem or topic in the field of computer science. Prerequisite: Approval of Department Chairman and Dean of the Faculty.

ECONOMICS

**Ec 101-102 PRINCIPLES OF ECONOMICS I AND II
3-0-3 Each**

Principles and problems of economics. First semester: supply and demand, United States economic system, national income ac-

counting, employment theory, fiscal policy, money and banking, monetary policy. Second semester: elasticity, consumer behavior, production costs, market structures (competition, oligopoly, monopoly), resource pricing, additional selected topics.

Ec 201 INTRODUCTION TO MATHEMATICAL ECONOMICS 3-0-3

An application of algebra and elementary calculus to further elaborate economic concepts and problems. Prerequisites: Ec 101-102; MA 121 or Ma 117 (Offered 1975-76).

Ec 301 INTERMEDIATE MICROECONOMIC THEORY 3-0-3

An in-depth study of corporate decision-making and resource allocation within the economic environment of free enterprise. Prerequisites: Ec 101-102; MA 121 or MA 117 (Offered 1976-77).

Ec 302 INTERMEDIATE MACROECONOMIC THEORY 3-0-3

Development of macro-economic theories of output, employment, inflation and growth; monetary and fiscal policies and analysis. Prerequisites: Ec 101-102; Ma 121 or Ma 117 (Offered 1976-77).

Ec 303 MONEY AND BANKING 3-0-3

A study of the United States money and banking systems; commercial banking, the Federal Reserve System, monetary theory and policy, interest rates, money markets, etc. Prerequisite: Ec 101-102 or P.O.I.

Ec 304 PUBLIC FINANCE 3-0-3

An application of macroeconomic theory to the problems of Federal, State and Local taxation, expenditures and debt management. Prerequisite: Ec 101.

Ec 306 DEVELOPMENT OF ECONOMIC THOUGHT 3-0-3

The historical and philosophical evolution of economic ideas and schools of thought from Smith, Ricardo and Marx to Marshall and Keynes.

Ec 307 INTERNATIONAL ECONOMICS 3-0-3

The basic concepts of international trade, international payments, and commercial policy. A combination of economic theory, policy

and practice. Prerequisite: Ec 101-102 or P.O.I. (Offered 1975-76).

Ec 308 COMPARATIVE ECONOMIC SYSTEMS 3-0-3

Examination, criticism and appraisal of alternative economic systems; capitalism, socialism, communism and mixed economic systems. Prerequisite: Ec 101 or P.O.I.

Ec 309 INTRODUCTION TO ECONOMETRICS 3-0-3

An application of basic statistical procedures to mathematically formulated economic theories (models) to measure their parameters and test their validities. Prerequisites: Ec 101-102; MA 151.

Ec 370-379 SPECIAL PROBLEMS 3-0-3

A course designed to allow students to explore topics and problems of current relevance in economics.

Ec 480-489 INDEPENDENT STUDY Variable Credit

Designed to allow the student to do independent study and research on a problem or topic in the field of economics. Prerequisite: Approval of Department Chairman and Dean of the Faculty.

MEDICAL SECRETARIAL SCIENCE

HC 101 MEDICAL OFFICE PROCEDURES 3-0-3

Simulation approach to medical office procedures, office protocol, etc. Prerequisite: BEd 111 or P.O.I. (Enrollment limited to Medical Secretarial students).

HC 109 MEDICAL ACCOUNTING-BOOKKEEPING 3-0-3

Examines standard record-keeping and bookkeeping for doctors and dentists. Financial statements and reports unique to the medical profession will also be studied. (Enrollment limited to Medical Secretarial students.)

HC 211 MEDICAL TERMINOLOGY 3-0-3

Terminology of Anatomical and Physiological procedures as used by the medical profession. Correct spelling will be stressed. (Offered 1976-77)

HC 219 MEDICAL TYPEWRITING 3-0-3

A course designed to cover specific details of typing required by the medical profession. (Enrollment limited to Medical Secretarial students.)

HC 272 PRACTICUM 6 Credits

The student will be placed in a hospital, doctor's or dentist's office for practical experience for a portion of a semester.

HEALTH CARE MANAGEMENT**HC 311 ORGANIZATIONS AND AGENCIES OF HEALTH CARE 3-0-3**

An overview of agencies and organizations which influence the delivery of health care. Roles and functions of health providers and consumers.

HC 312 INSTITUTIONAL FACILITY PLANNING AND DESIGN 3-0-3

Community planning and design for adequate health protection. Design and construction of special needs of health facilities.

HC 321 HEALTH SERVICES AND MEDICAL TEAM APPROACH 3-0-3

Medical team approach to health care. Roles of various individual groups as they distribute services to consumers. (Offered Fall 1975)

HC 322 HEALTH LAWS, ISSUES AND PUBLIC POLICIES 3-0-3

An examination of important laws, issues and public policies pertinent to health care management, with attention to regulatory authority, liability, social policy and operation of programs. Prerequisite: P.O.I. (Offered Spring 1976)

HC 472 INTERNSHIP 12 Credits

The student will be placed in a practical setting within a nursing home or hospital for a period of approximately one semester.



DEPARTMENT OF CHEMISTRY

BACHELOR OF SCIENCE

Chemistry may be studied at Elizabethtown as a field of specialization leading to careers in industry as a chemist or in chemical research in industry or the academic world or as preparation for careers in the professions of medicine, medical technology, chemical management, law, teaching at the elementary or secondary levels, and many other endeavors.

Standard programs, including one approved by the Committee on Professional Training of the American Chemical Society, are available in these areas and individual programs may be formulated to suit the student's career goals by consultation with the student's advisor and the department chairman. Students planning much work in the Department of Chemistry should consult with a departmental advisor as early as possible to plan the sequence of courses in chemistry, mathematics, physics, language and allied sciences which will be to their greatest advantage. Many upper level chemistry courses have calculus and physics courses as prerequisites, making it desirable to have these early. The sequence for secondary education also requires early planning to insure the proper spacing of education courses.

The curriculum preparing students for medical technology in cooperation with American Society of Clinical Pathologists accredited hospitals has been recorded at the Board of Registry of Medical Technologists. A student who completes the three-year curriculum (100 semester hours) successfully and a 12-month period of study in an American Society of Clinical Pathologists and Elizabethtown College approved hospital, will be granted a B.S. Degree upon the recommendation of the Pathologist or teaching supervisor of the approved hospital and the Program Director of the College.

Elizabethtown College is affiliated with Harrisburg Hospital, York Hospital, Lancaster General Hospital, St. Joseph's Hospital (Lancaster, Pa.), Polyclinic Hospital (Harrisburg, Pa.), West Jersey Hospital (Camden, N.J.), and Abington Hospital. These affiliations are recorded with the National Accrediting Agency for Clinical Laboratory Sciences. Admission to these and other approved hospitals is on a competitive basis. A student may complete a fourth year (optional) on campus prior to entering the clinical year. An additional 28 semester hours are required and the B.S. Degree will be granted upon successful completion of the four-year college program.

Curriculum

All curricular options in the Department of Chemistry, except the three-year medical technology option, require the General Education Core of courses specified by the College for the B.S. Degree, the specific chemistry and related science courses listed below, plus elective courses to equal 128 semester hours.

(a) The American Chemical Society approved option, preparing the student for a career in industry or for graduate school requires Ch 101-2, 201-2, 341, 343, 344, 351-2, 401, 422 and 451 or 491. Related courses in which competency is required at the level indicated are Modern Language (Ge preferred or Ru or Fr) 202, CS 103, 105, 107, Ma 201, 222, and Phy 232.

(b) The pre-medical option is the same as the above except that the student may elect four additional credits of advanced biology in place of Ch 451 or 491, is required to take Bio 103-4 and two advanced biology courses, is not required to take Ma 201 and is required to demonstrate competency at the Phy 231 level.

(c) The secondary education option requires those chemistry courses listed in the ACS approved curriculum except Ch 401, 422, 451 and/or 491. Related courses in which competency is required at the level indicated are Modern Language (Ge preferred) 202, CS 103, 105, 107, Ma 222, Phy 231, Psy 105, Ed 215, 305, 472.

(d) The chemistry-management option requires the same chemistry courses as the secondary education option. Related courses in which competency is required at the indicated level are Modern Language (Ge preferred, Ru, Fr) 202, CS 103, 105, 107, Ma 222, Phy 231, Ac 107, BA 215, 325, 332, 361, 366, 466, Ec 102.

(e) The medical technology three-year option requires Ch 101-2, 201-2, 301, 322 (Ch 312 recommended). Related courses in which competency is required at the indicated level are Bio 103, 104, 205, plus 209 or 253 or 215 or 316, Phy 112, Ma 101 or 121.* Core and electives must total 100 semester hours. The clinical internship minimum is an additional 28 semester hours. The four-year medical technology option requires additionally, Ch 312, one additional course in biology, Ma 151 and core and electives to total 128 semester hours.

(f) The chemical physics option requires Ch 101-104, 201, 341, (or Phy 403), 343, 344, 351-2. Related courses in which competency is required are Modern Language (Ge preferred) 202, CS 103, 105, 107, Ma 201, 222, 321 (or 362), Phy 232, 344 plus two courses (minimum of seven sem. hrs.) from the following: Ch 401, 422, 451, 491, Ma 362, Phy 404, 407, 408, 490.

Secondary General Science Certification

The teaching certificate program in general science with a chemistry concentration requires: Ch 101, 102, 201, 202, and any other combination of chemistry courses for which the student has the prerequisites.

COURSE OFFERINGS**Ch 101, 102, 104 GENERAL CHEMISTRY 3-3-4 each**

A study of the principles of chemistry from the viewpoint of modern theory of atomic and molecular structure. Ch 101 (prerequisite: high school algebra or equivalent), (Fall) is a prerequisite for Ch 102 and 104. Ch 102 (Spring) treats in detail the principles of chemical equilibria in aqueous solutions and is designed for students who plan to take additional courses in chemistry. Ch 104 (Spring) is designed for students who will take no further chemistry and includes brief treatments of organic chemistry and other selected topics which are studied in depth in advanced courses.

Ch 201-202 ORGANIC CHEMISTRY 3-3-4 each

A study of the compounds of carbon, aliphatic and aromatic, their properties, synthesis, structures, uses and mechanisms of their reactions and applications of instrumental methods. Prerequisite: Ch 102.

Ch 301 QUANTITATIVE ANALYSIS 2-8-4

Principles and practices of chemical analysis by gravimetric, volumetric, colorimetric and instrumental methods. Methods and determinations chosen to be appropriate to the student's major. Prerequisite: 102.

Ch 312 INSTRUMENTAL ANALYSIS 2-8-4

Analysis with modern instruments and techniques including mainly spectrophotometry, potentiometry, gas chromatography and electronics. Emphasis is on chemical and physical theories that make instrumental methods useful. Prerequisite Ch 301.

Ch 322 BIOCHEMISTRY 2-6-4

An introduction to the chemistry of living matter including principles and experimental techniques required to understand the struc-

tures, properties and metabolism of proteins, lipids, carbohydrates and nucleic acids. Prerequisite: Ch 202 & 301 or 351.

Ch 341 CHEMICAL EQUILIBRIUM & KINETICS 3-0-3

An introduction to thermodynamics as applied to chemical equilibria in ideal and non-ideal, homogeneous and heterogeneous systems; ionic solutions and electrochemistry; rate equations and their molecular basis. Prerequisite: Ch 102, Ma 322, Phy 231. Fall

Ch 343 INTRODUCTION TO QUANTUM THEORY 3-0-3

An introduction to the principles of quantum theory, radiation, atomic spectra, and the extranuclear structure of the atom. Prerequisites: Ch 102, Ma 222, Phy 211 or 231. Fall

Ch 344 CHEMICAL BONDING AND THE STRUCTURE OF MATTER 3-0-3

Chemical bonding including ionic bonding, the valence-bond and molecular orbital theories of covalent bonding, and intermolecular forces; methods of determination of molecular structure including spectroscopic and diffraction methods; magnetic resonance spectroscopy, and diffraction methods; liquid and solid states of matter. Prerequisite: Ch 343 or Ch 102 or 104, & Phy 403. Spring

Ch 351, 352 ADVANCED CHEMISTRY LABORATORY I, II 2-8-4, II 1-12-4

Prerequisite: CS 105, Ch 202; Corequisite: Ch 341, 343. Fall-Spring

Ch 451 ADVANCED CHEMISTRY LABORATORY III 0-16-4

A sequence of courses integrating synthetic, analytical, physical, organic, inorganic, biochemical, and radiochemical laboratory practices. Individual problems may require from three to ten weeks. The chemical literature, digital computers, and statistical methods are introduced during the first semester and used extensively thereafter. Maintenance of a good laboratory record is stressed. Use of modern instrumentation such as the infrared spectrophotometer, gas chromatograph, x-ray diffractometer, NMR spectrometer, and analog computer is required. All experimental work is conducted on an individual basis. By the time a student has completed Ch 451 he should be familiar with the basic laboratory practices appropriate for a chemist at the Bachelor's level. Prerequisite: Ch 352. Fall

Ch 371-380 SPECIAL TOPICS IN CHEMISTRY
Variable Credit

Study of an advanced topic, experimental or theoretical, of special interest to the student. Prerequisite: P.O.I. and Dept. Chrmn.

Ch 401 ADVANCED INORGANIC CHEMISTRY 3-0-3

A study of the elements and their compounds based upon atomic and molecular structures. Prerequisite: Ch 344

Ch 422 ADVANCED ORGANIC CHEMISTRY 3-0-3

A study of organic reactions based upon experimental and advanced theoretical studies. Prerequisite: Ch 202 & 344

Ch 491-492 RESEARCH IN CHEMISTRY Variable Credit

An original experimental or theoretical investigation under the close supervision of a faculty member. Subjects for research may be the outgrowth of problems encountered in an earlier course or part of the faculty member's personal research. Experimental design and a written report are required. Prerequisite: Ch 352 & P.O.I.

*In this curricular option Ma 101 or Ma 121 is defined as meeting the core requirement for mathematics instead of six credits.



COMMUNICATION ARTS PROGRAM

BACHELOR OF ARTS

The Communication Arts Program, involving the areas of speech, theatre, broadcasting, and journalism, is conceived as a liberal arts study designed to fit the student to lead a meaningful and productive life on personal, interpersonal, and public levels; assist the student in developing the ability to communicate effectively in a democratic society; lay a strong foundation for careers in the professions, government, public or social service, the ministry, counseling, business, industry, and education. In addition, the program offers activities which are open to the entire college community: play production, forensics and debate, radio broadcasting in conjunction with WVEC college radio.

Requirements for a BA in Communication Arts are Com 105, 151, 231, 241, 12 additional hours from the Communication Arts program, 15 additional hours which may or may not be taken within the Communication Arts Program subject to the following conditions: a.) the student will be required to submit *in writing* to his advisor, the rationale for selecting courses, and how they would relate to his overall program, the goals, and the objectives which he has established for himself in consultation with his advisor; b.) this rationale must be approved by the advisor and chairman of the program and would go into the advisee's folder.

Requirements for a BA in Communications Arts with secondary certification are a Communication Arts core of 18 hours including Com 105, En 201 or ML 387, En 100, En 306a, for all three tracks (see below). If the chosen track is in Literature, the remaining six hours of the core are to be in Communication Arts courses. If the track is either Speech-Mass Communications or Theatre, the remaining six hours of the core are to be in Literature. Communication Arts majors with secondary education certification may not be exempted from English composition courses or the basic speech course by competency tests.

Any student majoring in Communication Arts is expected to actively participate in the various extra-curricular activities sponsored by the program.

COURSE OFFERINGS

Com 105 SPEECH 3-0-3

An introduction to the study of effective speaking; emphasis upon proper articulation, poise, interpretative reading, listening, speaking from notes, preparing outlines, and organizing speeches.

Com 151 INVITATION TO THE THEATRE 2-2-3

Theatre as a social experience, its place in history and its current role in our society. Trips to area productions, paid for by students, will be an essential part of the course.

Com 152 HISTORY OF THE THEATRE 3-0-3

A course dealing with the plays, playwrights, actors, and designers of the theatre with emphasis on the development of Western theatre.

Com 201 ADVANCED SPEECH AND DEBATE 3-0-3

A consideration of processes and techniques of effective communication practice with emphasis upon argumentation. Offered alternate years: 1975-76

Com 204 GENERAL SEMANTICS 3-0-3

A course designed to develop an understanding and awareness of the interrelationship between ideas, language and behavior. Offered alternate years: 1976-77

Com 205 APPLIED SPEECH 0-4-1

A maximum of four semester hours may be earned by satisfactory, faculty-supervised performance in forensic activity. P.O.I.

Com 231 JOURNALISM 2-2-3

An introductory study of news media and values, with emphasis on effective reporting through the analysis and writing of news stories, editorials, and feature articles.

Com 232 WRITING FOR TELEVISION AND RADIO 3-0-3

A basic course designed to introduce the student to the varied kinds of on-air writing within the broadcasting industry.

Com 241 INTRODUCTION TO BROADCASTING 2-2-3

A basic course covering the philosophy, operation and financing of public and private TV stations in the United States.

Com 242 RADIO PRODUCTION 2-2-3

Principles and theories of radio announcing, casting, rehearsing and production methods.

Com 247 MASS COMMUNICATIONS AND SOCIETY 3-0-3

An examination of the impact of Mass Media (magazines, newspapers, comic books, film, radio, and TV) on society, with particular emphasis on television's role in society.

Com 251 STAGECRAFT AND LIGHTING 2-2-3

A course in the techniques and theories used to stage and light a theatre production. Set construction and current lighting effects will be studied.

Com 252 BASIC ACTING 2-2-3

Designed to acquaint the student with acting methods. Students will be expected to participate in a number of class projects involving the memorization of parts.

Com 265 COLLEGE THEATRE PRACTICUM 0-3-1/2

Campus play-producing organization offering membership to all students. Supervised experience in the presentation of college and student productions.

Com 301 ORAL INTERPRETATION 3-0-3

A course dealing with the oral presentation of literature. Offered Alternate Years: 1975-76

Com 302 DISCUSSION AND GROUP DYNAMICS 3-0-3

The study of small groups employing: communication, con-

formity, roles, norms, leadership, and problem solving. Emphasis is placed upon applying group dynamics to everyday life.

Com 352 DRAMATIC PRODUCTION 2-2-3

A course in the techniques of producing plays. The course would culminate in a campus production of some type. Offered alternate years: 1976-77 P.O.I.

Com 354 DIRECTION 2-2-3

Principles and theories of stage movement, blocking, casting, rehearsing and directing the work of actors and others connected with theatre production. Alternate years: 1976-77, P.O.I.

Com 370-379 SPECIAL PROBLEMS/SEMINARS IN COMMUNICATION ARTS Variable Credit**Credit**

A course designed to allow the student to pursue topics of special relevance.

Com 470-479 PRACTICUM AND INTERNSHIP Variable credit

Instruction on an individual basis for credit from Communication Arts faculty or other qualified professionals in the student's chosen field; i.e., speech, theatre, broadcasting, journalism, or film. P.O.I.

Com 480-489 INDEPENDENT STUDY IN COMMUNICATION ARTS Variable Credit

Designed to give a student the opportunity to work in an area of major interest under the guidance of member of the Communication Arts Program. P.O.I.

DEPARTMENT OF EDUCATION

BACHELOR OF SCIENCE

The department offers three major certification programs: Early Childhood (N-3), Elementary (K-6), Secondary (7-12). The programs project the student deeply into the liberal arts rather than withholding him from them. The programs seek to bring the student to a high level of professional competence by bringing together in a creative way the student, the school, and the content to be learned. In addition to the major requirements in Early Childhood and Elementary Education the department encourages students to fulfill a concentration of 18 credits in another academic area.

Admission to Teacher Education program

Each applicant who is planning to teach must declare his intention to the Department of Education not later than the completion of Education 205, (or 215) Foundations of Education, by filing the written application for admission to the Teacher Education Program and meeting the qualifications of the Committee on Teacher Education. The criteria formulated by the Committee on Teacher Education are listed below. Applicants who do not meet the requirements, or who fail to maintain the required progress levels, are counseled out of the teacher education program and directed into other areas of endeavor. The criteria are as follows:

1. Approval of the major department for prospective secondary school candidates
2. English and speech proficiency
3. Good physical and mental health
4. Scholarship: a grade point average of 2.0 or better
5. Personal qualifications: Approval from the Offices of Student Affairs and recommendation of members of the teacher education faculty.

Progress toward program completion

1. A student will not be recommended for certification if he has any grade below "C" in the teaching major after completion of the 100 level courses.
2. The student is evaluated at the conclusion of each se-

mester after admission to the Teacher Education Program. The student may be counseled out of the program at any time if, in the opinion of the Teacher Education Faculty, he is not making adequate and acceptable progress.

3. Admission to the Teacher Education Program is not automatic because of application and completion of Education 205 or Education 215. Each applicant is individually evaluated and must possess a q.p.a. of 2.0 or above to be eligible for subsequent courses.
4. Admission to the Teacher Education Program does not imply that the student will be guaranteed completion of the program and certification. A student may be advised to withdraw from the program at any time if the Teacher Education Faculty determines that it is in the best interest of the College, the program, and the student.
5. Certification should be applied for during the semester of graduation. Certification after graduation will necessitate fulfilling requirements at the time of application for certification.

CERTIFICATION PROGRAM REQUIREMENTS

The Secondary Certification Program

- A. General Education as projected by the College.
- B. Academic major as outlined by each program area which supports a certification program. (Business Education, Communication Arts, English, Language, Mathematics, Science, Social Studies)
- C. Professional Education sequence as follows: Ed 215, Ed 225D, Ed 305, Ed 225E, Ed 472

The Elementary Education Major

Requirements for a B.S. in Elementary Education are the following:

- A. General Education as projected by the College.
- B. Professional Education courses as follows: Ed 205, Ed 225 (A-C), Ed 235, Ed 325, Ed 335, Ed 355, Ed 365, Ed 471, Ed 498, Ma 211-212, Psy 225, PE 285, Mu 325 and 326.

The Early Childhood Education Major

Early childhood education encompasses the total growth and development of the child from birth through eight years of age. The Early Childhood Education major is designed to prepare 1.) classroom teachers for nursery school, kindergarten and grades one, two, or three in both public and private schools, and 2.) teachers in Day Care Centers, Child Welfare Centers, Child Development Centers, Head Start, Follow Through, and other child care centers. The program leads to a nursery-kindergarten-primary (N-K-3) teaching certificate.

The requirements for a B.S. degree in Early Childhood Education are as follows:

- A. General Education Program as projected by the college. Psy 225 must be selected as part of the social science requirement and Psy 205 is strongly recommended.
- B. Professional Education sequence as follows: Ed 205, Ed 225A, Ed 235, Ed 315, Ed 325, Ed 335, Ed 355, Ed 365, Ed 471, Ed 498, Ma 211-212, Psy 225, P.E. 285, Mu 325.

Special Education Certification

Elizabethtown College in cooperation with Millersville State College provides an opportunity for a limited number of prospective teachers to become certified through Millersville's Special Education Program. Prospective teachers in Early Childhood or Elementary Education may be certified in a) Mental Retardation, b) Socially-Emotionally Disturbed.

The certification program requires attendance at Millersville State College for two summers and student teaching for 8 weeks in Special Education supervised by Millersville State College and 8 weeks in Elementary Education supervised by Elizabethtown College. Each student will have to fill out special application forms and be recommended by the Elizabethtown Education Department before being accepted into the program. A recommended sequence of course work to be taken at Millersville may be obtained from the Elizabethtown Education Department.

COURSE OFFERINGS

Ed 205 FOUNDATIONS OF EDUCATION 3-2-4

This course involves the student in a study of some of the historical, philosophical, sociological, and psychological foundations of education. Prerequisite: Psy 105

Ed 215 INTRODUCTION TO SECONDARY EDUCATION 3-3-4

This course introduces the students to both problems and theory of secondary education with an emphasis upon the development of teaching skills and an involvement in public school education through inschool observations. Co-req. Ed 225D Prerequisite: Psy 105

NOTE: Admission to the Teacher Education Program is a prerequisite to any other Education course.

Ed 225 (A-E) EDUCATION PRACTICUM Variable Credit

This course provides preschool, elementary, or secondary classroom experience. In addition the course includes instruction in media. Classroom experience and on-campus study is integrated in the practicum and co-requisite courses.

Ed 235 FUNDAMENTALS OF READING INSTRUCTION 2-3-3

This introductory course focuses on systematic assessment and teaching of basic reading skills: word recognition, word analysis, and comprehension skills. Co-req. Ed 225B

Ed 305 PRACTICUM IN SECONDARY EDUCATION 3-4-4

This course provides study in two specific areas: the instructional methodology of an academic discipline and in-school experience. The methodology and the classroom experience is integrated under the guidance of a clinical professor representing the academic major. Co-req. Ed 225E

Social Studies (Fall), Mathematics (Offered alternate years—Fall, 1975), Modern Language (Offered alternate years—Fall, 1975), Science (Offered alternate years—Fall, 1976), English and Communication Arts (Fall).

Ed 315 EARLY CHILDHOOD EDUCATION 3-3-4 (Fall)

A study of preschool through Grade 3 programs emphasizing the setting, the child, and the special needs and approaches of early childhood education. On-campus study will be coordinated with observation/participation experience in early childhood settings. Prerequisite: Psy 225

**Ed 320 SPECIAL METHODS IN EARLY CHILDHOOD
EDUCATION 4-0-4 (Spring)**

This course is designed to integrate the materials and methods, which are taught in other sections of the Junior Block, into the framework of the pre-operational child.

****Ed 325 SCIENCE FOR THE PRESCHOOL 3-0-3 AND
ELEMENTARY CHILD 4-0-4**

A study of the concepts, procedures, and materials of science for the preschool and elementary child.

****Ed 335 MATHEMATICS FOR THE PRESCHOOL
3-0-3 AND ELEMENTARY CHILD 4-0-4**

A study of the concepts, procedures, and materials of mathematics for the preschool and elementary child.

****Ed 355 LANGUAGE ARTS AND READING FOR THE
PRESCHOOL 3-0-3 AND ELEMENTARY
CHILD 4-0-4**

A study of the concepts, procedures, and materials in the language arts and reading for the preschool and elementary child.

****Ed 365 SOCIAL STUDIES FOR THE PRESCHOOL
3-0-3 AND ELEMENTARY CHILD 4-0-4**

A study of the concepts, procedures, and materials of social studies for the preschool and elementary child.

****Corequisite courses**

**Ed 371-380 SPECIAL PROBLEMS IN EDUCATION
Variable credit**

These courses involve topics chosen in response to student and faculty interests. Prerequisite: P.O.I.

**Ed 471 PROFESSIONAL INTERNSHIP, PRESCHOOL
AND ELEMENTARY 16 s.h.**

Student teaching in a preschool and/or elementary classroom.

**Ed 472 PROFESSIONAL INTERNSHIP, SECONDARY
16 s.h.**

Student teaching in a secondary classroom. A weekly seminar is a part of the professional semester.

Ed 480-489 INDEPENDENT STUDY Variable Credit

Upon the initiative of the student a program will be organized with a faculty member to study a topic of mutual interest.

Ed 498 SPECIAL TOPICS Variable Credit

Courses designed to give students an opportunity to pursue work in an area of major interest. Possible topics to be covered in the work of the course could include Community Agencies and Education, Children's Literature, Early Childhood Education, Trends and Developments in Education, Art in the Elementary School, Simulation in Education.

DEPARTMENT OF ENGLISH

BACHELOR OF ARTS

The Department of English recognizes its responsibility to educate students not only in the effective use of the English language, but also to contribute to their cultural growth. Accordingly, proficiency in the communication skills (reading, writing, speaking, and listening) and in the appreciation of literature are the fundamental aims of the program.

Students preparing to teach English on the secondary level receive a thorough and comprehensive knowledge of and experience in the discipline which they are planning to teach.

By giving many elective privileges to the student who wishes to teach, the department provides a broad intellectual base for professional performance.

ENGLISH MAJOR

A.B. with Major in English

Required courses for a major in English: 42 semester hours: En 105 (three hours), En 307 (six hours from a, b, or c), En 307d (six hours), En 309 (three hours), Electives (24 hours)

Secondary Certification

In addition to requirements for the English major, students preparing to teach English on the secondary level are required to take the following courses for certification: Ed 215 (four hours), and corequisite Ed 225d (one hour); Ed 305 (four hours), and co-requisite Ed 225e (1 hour); En 305a (three hours); Ed 472 (16 hours).

COURSE OFFERINGS

En 100 EXPOSITORY WRITING 3-0-3

A course in the principles of writing compositions in expository and persuasive discourse, required for students not passing the proficiency examination and an elective for others.

En 105 INTRODUCTION TO LITERATURE 3-0-3

Normally prerequisite to all literature courses. A study of the short story, novel, drama and verse, intended to develop the student's ability to analyze, evaluate, and appreciate literature.

En 200 ADVANCED COMPOSITION 3-0-3

A course in the principles of non-fiction prose writing for students who wish to improve their skills. Research methods, critical analysis, and practice in writing are stressed. Alternate years, Spring 1976.

En 301 STUDIES IN BACKGROUNDS OF LITERATURE

A study of the effect of a significant event or a related series of works or events upon subsequent literary works.

a. Classical Backgrounds of Literature 3-0-3

The study of classical mythology and literature as meaningful allusions, symbols, and archetypes is traced in representative works of English and American literature. Alternate years; Fall, 1975

En 302 STUDIES IN LITERARY FORMS

Intensive exploration of the nature and evolution of a selected literary form, e.g., the poem, the novel, the play.

a. The Rise and Development of English Drama to 1900 3-0-3

Representative English plays which still hold the stage, exclusive of Shakespeare, from the Medieval period to the 20th century with emphasis on the Elizabethan and Jacobean periods. Alternate years, Fall 1975

b. The Rise and Development of the English Novel 3-0-3

A study of selected masterpieces from Defoe to Hardy as works of prose art and as turning points in the development of the form. Alternate years, Spring 1977

c. Analysis of Poems 3-0-3

Intensive training in reading the individual poem accurately and sensitively. Alternate years, Spring 1976

d. Modern Drama 3-0-3

A study of drama from the realism of Ibsen through naturalism, expressionism, and symbolism to the current avant garde theatre. Alternate years, Fall 1975

e. Contemporary Poetry 3-0-3

A study of at least three major 20th century poets as well

as selections from writers who have published within the last twenty years. Spring

f. Contemporary Novel 3-0-3

A study of the work of major novelists of the 20th century with emphasis upon the development of the novel as an art form. Fall

En 303 STUDIES IN LITERARY MOVEMENTS AND ATTITUDES

Study of a group of literary works representative of a particular movement, point of view, or attitude: a body of material in which there are important similarities in emotional, aesthetic, or intellectual content.

a. Concepts of the Renaissance 3-0-3

A study of the "ruling ideas" of the Renaissance in Britain. Representative non-dramatic writers with emphasis on Spenser. Alternate years, Spring 1977

b. The Seventeenth Century 3-0-3

A study of the Metaphysical Poets and other major writers of the period, excluding Milton. Alternate years, Spring 1976

c. The Restoration and Eighteenth Century 3-0-3

The poetry and prose of the Restoration and 18th century with emphasis on Dryden, Swift, Pope, Johnson, and Blake, excluding the novel and drama. Alternate years, Fall 1976

d. The Romantic Movement 3-0-3

A study of selected writings which most significantly embody the central concepts and achievements of English Romanticism. Fall

e. The Victorian Period 3-0-3

A study of Victorian poetry and prose from Tennyson to Hardy with special emphasis on the response of the writer to the conflict, controversy, and the industrialization of the age. Alternate Years, Spring 1977

En 304 STUDIES IN INDIVIDUAL AUTHORS

Consideration of a significant and coherent portion of the work of a single author.

a. Chaucer 3-0-3

Alternate years, Fall 1976

b. Shakespeare I 3-0-3

Fall

c. Shakespeare II 3-0-3

Spring

d. Milton 3-0-3

Fall, 1975

e. Dickens 3-0-3

Fall, 1975

En 305 STUDIES IN THE TEACHING OF ENGLISH

Study of the methods and materials related to the teaching of English at the secondary school level.

a. Ed 305 METHODS SEMINAR IN LITERATURE AND COMMUNICATION ARTS

The inductive teaching of literature and communication combined with in-school observation and teaching periods. Co-requisite with Ed 225e prior to professional semester. (Ed 305—four credits Ed 225e—one credit).

b. En 305 METHODS SEMINAR IN LANGUAGE AND COMPOSITION 3-0-3

The inductive teaching of language, the various grammars, and their utilization in teaching composition at the secondary level. Prerequisite to professional semester. Spring

En 306 STUDIES IN LANGUAGE AND COMPOSITION

Study of different aspects of language and composition

*a. Creative Writing (poetry) 3-0-3

A course for the writing of original verse and an understanding of the craftsmanship involved. Graded Pass, No-Pass; P.O.I. Fall

*b. Creative Writing (prose) 3-0-3

A course to instruct the student in the production of original works of prose and to acquaint him with literary terminology. Graded Pass, No-Pass; P.O.I. Spring

c. Linguistics 3-0-3

An investigation of English language and usage to the present time, with stress on structure, phonetics, morphology, syntax, applied linguistics, and dialectology.

En 307 STUDIES IN A NATIONAL LITERARY TRADITION

Consideration of a significant portion of the tradition of the literature of one nation.

a. The American Romantic Movement 3-0-3

Emphasis on an analysis of representative works by Hawthorne, Poe, Melville, Emerson, Thoreau, and Whitman. Fall, 1976

b. The Rise of Realism in American Literature 3-0-3

Emphasis on an analysis of representative works by Dickinson, Clemens, James, Crane, Robinson, Frost, Dreiser, Cather and Anderson. Fall, 1975 and Spring, 1977

c. Experimentalism in American Literature 3-0-3

Emphasis on an analysis of representative works by Fitzgerald, Hemingway, Pound, Eliot, Cummings, Faulkner, Williams, Stevens, Jeffers, Hart Crane, Moore, Welty, Bellow and Nabokov. Spring, 1976



- d, e. **Literary History of Britain I and II** 3-0-3
Emphasis on the development of the literature of Britain, the rise of the literary forms and movements, and the influence of major writers. First semester: beginnings through 18th century. Second semester: 19th and 20th centuries. Prerequisites: En 105 and P.O.I. Fall, 1975, 76; Spring, 1976, 77
- *f. **Dramatic Literature of Ireland** 3-0-3
A study of selected Irish dramatists. Spring, 1976

En 308 STUDIES IN PROBLEMS OF LITERATURE

Consideration of a particular problem as it appears in literature.

- a. **Women and Literature** 3-0-3
A course which seeks to explore the effects on women writers and readers of a male dominated literary tradition. Alternate years, Fall 1976
- *b. **Madness in Literature** 3-0-3
A consideration of the thematic and structural use of madness in literature as well as the effect of mental illness on a writer's work. Alternate years, Spring, 1977
- c. **Fantasy in Literature** 3-0-3
A study of major works of fantasy (Alice in Wonderland, The Hobbit, The Little Prince, and others) focusing on the thematic significance of "the journey." Alternate years, Spring 1976

En 309 LITERARY CRITICISM 3-0-3

Studies in the methods of literary criticism, the aim of which is to

enable students to develop for themselves a sound approach to literature. Spring

***En 310 GREAT BOOKS 3-0-3**

Wide reading and a discussion of the ideas in some of the classics of Western literature from the Greeks to Hesse. Prerequisite: P.O.I. Spring, 1976

En 481-90 INDEPENDENT STUDIES IN ENGLISH **Variable Credit**

This course is designed to give the individual student the opportunity to pursue work in an area of major interest under the guidance of a member of the English Department.

CORE COURSES: Only courses listed in the Catalog under En 302, 303, 304, 307, and 308 will satisfy the literature requirement in Core.

En 371-380 SPECIAL PROBLEMS 3-0-3

These courses involve special subjects chosen as a response to student and faculty interest.

*Asterisk indicates course will be offered contingent upon sufficient staff and enrollment.

DEPARTMENT OF HISTORY

BACHELOR OF ARTS

The study of history encourages the student to assess the relationships between facts and ideas, and also to orient himself intelligently in time. The departmental program is designed to prepare students for further study or for careers in teaching, government service, and business.

Requirements in History

The history major requires the student to satisfactorily complete 39 hours of work in history, including Hi 105 (or its equivalent) and Hi 390. One is required to select nine hours in United States history; nine hours in European history, and six hours in non-U.S., non-European courses.

History is one of the major areas in the social science major preparing a student for certification to teach in secondary schools. All students wishing to teach social studies must have at least 12 hours in history regardless of their major area, including Western Civilization (Hi 105) and United States History (Hi 201-Hi 202). Twenty four hours of history is required if history is chosen as the major area in the social sciences. The hours must include the following:

Hi 105, Hi 201, Hi 202, Hi 390, one European history beyond Hi 105, and one course in non-United States and non-European History. Six hours are elective. It is suggested that an Afro-American history course be chosen as an elective.

It is also possible for the student to acquire a B.A. in History as a history major and receive teaching certification in the social studies. For further explanation, contact a member of the History Department.

When history is selected as one of the major areas for the social science major which does not prepare for a teaching career, the following are required:

For the 24-hour major, take the same sequence suggested above for those wishing to teach Social Studies; for the 15-hour minor, take Hi 105, Hi 201, Hi 202, and six hours of electives in history.

Area of Concentration

For the elementary education concentration the department requires satisfactory completion of 24 hours, including Hi 105 or

its equivalent. Students must complete nine hours of United States history, including Hi 201-202; three hours of European history beyond Hi 105; and three hours in a non-U.S., non-European area. The other six hours are history electives.

Exceptions to the above requirements must have the approval of the History Department.

Combinations which allow the student a major and training for other careers are possible. For example, one may major in history and also complete the basic core program in business. Consult the department for details.

COURSE OFFERINGS

Hi 105 TOPICS IN THE HISTORY OF WESTERN CIVILIZATION 3-0-3

A highly selective approach to the long-range developments and to the major problems of our Western heritage.

Hi 201-202 HISTORY OF THE UNITED STATES 3-0-3 Each

An incisive analysis of the economic, political, diplomatic, social, and intellectual currents that have molded the American experience. The two-semester course is divided at 1877.

Hi 205 MODERN FAR EAST 3-0-3

A general survey of China, Japan, Korea, and Southeast Asia from about 1800 to the present with special emphasis on East-West relations.

Hi 213 RENAISSANCE AND REFORMATION 3-0-3

Politics, society, and humanism in Renaissance Italy, particularly in Florence; The new monarchs, the northern humanists, and the Protestant Reformation of the sixteenth century.

Hi 214 ABSOLUTE MONARCHY 3-0-3

Political, social, and religious problems of Divine-Right monarchs and the struggles for power in the seventeenth and eighteenth centuries. The emphasis will be on Stuart England and Bourbon France.

Hi 215-216 ENGLISH HISTORY 3-0-3 Each

A consideration of the entire span of English History from earliest times to the present. Special attention is given to monarchy, society, economy, religion, and parliamentary development.

Hi 306 RECENT HISTORY OF THE UNITED STATES 3-0-3

An intensive analysis of the vexing economic, political, social, and diplomatic forces responsible for shaping the American experience since 1900: conflicting interpretations emphasized.

Hi 313-314 HISTORY OF RUSSIA: TSARIST AND SOVIET 3-0-3 Each

The development of Russia from its medieval origins to the Revolution, with emphasis placed on the development of Tsarist institutions and society; the second term considers the Russian Revolution and the building of the new society, with emphasis on the Soviet Union's position in the modern world.

Hi 317 REVOLUTION, NATIONALISM AND DEMOCRACY 3-0-3

Nineteenth Century Europe from the Vienna Congress to World War I, with particular emphasis on the conservative reaction to the French Revolution, the movement towards democracy, and surging nationalism.

Hi 318 THE AGE OF ANXIETY 3-0-3

An examination of Twentieth Century Europe, surveying both World Wars and their effect on modern society. The focus is on the rise of totalitarian ideologies, the plight of democracy, and the depression.

Hi 323 HISTORY OF CHINA 3-0-3

A survey of Chinese history and culture with emphasis on the modern period and the meeting of China and the West.

Hi 324 HISTORY OF JAPAN 3-0-3

A survey of Japanese history and culture from the beginnings to modern times including Japan's response to the western impact.

Hi 327 HISTORY OF AFRICA 3-0-3

A survey of African history, including the growth of African empires, the impact of Islam, the age of imperialism and colonialism, and the emergence of nationalism.

Hi 328 MODERN AFRICA 3-0-3

Africa in the nineteenth and twentieth centuries, with emphasis on the age of imperialism and colonialism, as well as on African nationalism leading to Independence.

Hi 329 HISTORY OF LATIN AMERICA 3-0-3

Latin American development since Independence, with stress placed on contemporary political and economic developments as they relate to United States policy.

Hi 330-339 STUDIES IN UNITED STATES HISTORY 3-0-3 Each

An analytical inquiry into special topics and periods: Economic History, Urban History, Colonial America, The American Revolution, The Middle Period, The Age of Industrialism, Technology and Society, etc.

Hi 340-349 MINORITIES IN UNITED STATES HISTORY 3-0-3 Each

An incisive view of minorities in a society venerating majoritarian rule: Afro-American History, Minorities in America, Southern History, Indian History, Women in History, etc.

Hi 370-379 SPECIAL PROBLEMS 3-0-3 Each

This consists of special subjects chosen as a response to student and faculty interest. Repeatable for credit.

Hi 390 HISTORICAL METHODS AND HISTORIOGRAPHY 3-0-3

Thorough examination of the development of the historical discipline, tools employed by the researcher, concluding with a study of the historians themselves. Required of junior majors and history concentrates.

Hi 403 A HISTORY OF UNITED STATES FOREIGN RELATIONS 3-0-3

A study of the major personalities, events, and trends in United States foreign policy with an emphasis on the influence exerted by domestic considerations.

Hi 406 SOCIAL AND INTELLECTUAL HISTORY OF THE UNITED STATES 3-0-3

An examination of the major social and intellectual movements in the United States from colonial times to present with an emphasis on reform and reformers.

Hi 411 GREEK AND ROMAN HISTORY 3-0-3

Athens in the classical age from Solon to Alexander; Rome during the Republic, the Augustan Age and the early Empire. (Alternate Years; Fall, 1976)

Hi 412 MEDIEVAL HISTORY 3-0-3

Emphasis on the eleventh and twelfth centuries including such topics as the Gregorian Revolution in the Church, the Anglo-Norman monarchy, law, society, and the growth of universities. (Alternate Years; Spring, 1977)

Hi 480-489 INDEPENDENT STUDY Variable Credit

Designed to offer an opportunity to make use of techniques of historical interpretation in specific problem areas. Approval of the Dean of the Faculty is necessary. P.O.I.

Hi 498-499 HISTORY SEMINAR 3-0-3 Each

A special course designed primarily for (but not limited to) senior majors in the department. Research is an integral part of the learning experience.

Ed 305 PRACTICUM IN SECONDARY EDUCATION: SOCIAL STUDIES 3-3-4

Fall Term only. (See Education).

Geography Offerings

Geo 105 WORLD GEOGRAPHY 3-0-3

A regional and topical geography concentrating upon the Old World, including an introduction to political geography, and emphasizing human rather than physical geography.

Geo 205 GEOGRAPHY OF THE UNITED STATES AND PENNSYLVANIA 3-0-3

A regional geography of the United States, emphasizing the interrelationships between geography and economics, politics, and culture. Pennsylvania will be examined as one of several case studies.



DEPARTMENT OF MATHEMATICS

BACHELOR OF SCIENCE

The program in mathematics is designed to prepare the mathematics major for graduate study, secondary school teaching, or industry and government employment; to offer students in the sciences the mathematical background for their fields; and to give other students experience with mathematical reasoning and methods. Instruction is designed to aid in the development of self-reliance, initiative, and confidence as well as to provide mathematical information.

B.S. with Major in Mathematics

Mathematics: Minimum of 36 hours distributed as follows: Ma 121, 122, 201, 222, 421 and completion of one of the following options.

Option 1-Ma 301, 302, 422, 441 and six hours from other 300 or 400 mathematics courses. Students contemplating graduate work should plan to complete option 1.

Option 2-(This option is required for Secondary Education Certification.) Ma 301, 341, 351, either 302 or 422 and six hours from other 300 or 400 mathematics courses.

Option 3-Ma 351, 352, 321, 362, 422 and three hours from other 300 or 400 mathematics courses. This option is intended for students contemplating employment in industry or government upon graduation.

Modern Language: six hours in one language.

Computer Science: CS 125.

Area of Concentration: An area of concentration in mathematics is available for Elementary Education majors who choose that option in the Elementary Education program. Details may be obtained from the Mathematics Department.

COURSE OFFERINGS

Ma 011 REVIEW MATHEMATICS 3-0-0

A study of the fundamental arithmetic and algebraic skills prerequisite to college-level mathematics and science courses.

Ma 101 PRECALCULUS MATHEMATICS 4-0-4

Precalculus study of the function concept and of particular classes of functions: polynomials, rational functions, algebraic functions, logarithms, general powers, exponential and trigonometric functions. Normally, this course is taken only by students planning to take Ma 121 and not prepared to do so.

Ma 117-118 CONCEPTS OF CALCULUS I & II 4-0-4 Each

A presentation of the basic concepts and techniques of differential and integral calculus. The functions and their applications studied are limited to those most likely to occur in such areas as business, economics, the life and social sciences; namely, the algebraic, exponential, and logarithmic.

Ma 121-122 CALCULUS I & II 4-0-4 Each

Differential and integral calculus of the elementary functions with associated analytic geometry. This sequence is intended primarily for majors in mathematics or the physical sciences. This is not intended to exclude interested and capable students from other areas. Prerequisite: Ma 101 (competency)

Ma 151 PROBABILITY AND STATISTICS 3-0-3

A study of the basic principles of probability, frequency distributions, measures of location and dispersion, sample and population relationships, estimation, and hypothesis testing.

Ma 161 MATHEMATICS OF FINANCE 3-0-3

Simple interest, logarithmic computation, compound accumulation and present value, general annuities, certain bonds, sinking funds, and introductory life insurance and life annuities. (Offered upon sufficient enrollment and staff.)

Ma 201 LINEAR ALGEBRA 3-0-3

An introduction to linear algebra including matrices, determinants, applications to systems of linear equations, and linear transformations. Prerequisite: Ma 121

**Ma 211-212 CONCEPTS IN MODERN MATHEMATICS
I & II 3-0-3 Each**

A course designed primarily to provide mathematical training for prospective elementary school teachers. Explains the mathematics behind the content of modern elementary school mathematics programs. Includes mathematical reasoning, sets and relations, structure of number systems, algorithms, number theory, geometry and other topics.

Ma 222 CALCULUS III 4-0-4

A continuation of Ma 122. The completion of the basic topics of the calculus sequence including an introduction to differential equations and calculus of several variables. Prerequisite: Ma 122

Ma 301-302 ABSTRACT ALGEBRA I & II 3-0-3 Each

A study of fundamental set theory, relations, mappings, groups, construction of number systems, integral domains, divisibility, congruences, modular arithmetics, fields, polynomials over integral domains and over fields, vector spaces, linear transformations. Prerequisite: Ma 201

**Ma 321-322 APPLIED MATHEMATICS I&II
3-0-3 Each**

A study of selected topics in fields of mathematics relevant to problems arising in engineering and the physical sciences. Included are standard methods for solving ordinary differential equations and boundary value problems. Other topics will be selected from the following areas: power series solutions of differential equations, the Laplace transformation, vector analysis and matrices, line and surface integrals, Fourier series, partial differential equations, and complex variables. Prerequisite: Ma 222 (Ma 321 Fall) (Ma 322, offered alternate years: Spring 1977)

Ma 341 MODERN GEOMETRY 3-0-3

Euclidean and non-Euclidean geometry from a modern viewpoint, acquainting the student with the development of geometric thinking during the past twenty centuries and with recent discoveries. Prerequisite: Ma 201

**Ma 351-352 MATHEMATICAL STATISTICS I & II
3-0-3 Each**

The first semester is a study of probability and distribution theory, including the uniform, geometric, binomial, hypergeometric, negative binomial, multinomial, Poisson, exponential, Gamma, chi-square, Student's t, Snedecor's F, and normal distributions. The second semester is a study of principles of statistical inference with an emphasis on estimation and hypothesis testing. Prerequisite: Ma 222

Ma 362 NUMERICAL ANALYSIS 3-0-3

Iterative methods of solving equations, numerical methods of linear algebra, interpolation with polynomials, numerical differentiation and integration, along with numerical solutions of ordinary differential equations. Prerequisites: Ma 201, Ma 222, CS 125

**Ma 370-379 SPECIAL TOPICS IN
MATHEMATICS Variable Credit**

Prereq. Permission of the Department of Mathematics Directed study in topics of special interest to advanced undergraduate mathematics students.

Ma 421-422 REAL ANALYSIS I & II 3-0-3 Each

Introduction to modern abstract theory of calculus. Careful analysis of the concepts and properties of point sets, sequences, limits, continuity, derivative, integration, sequences of functions, functions of several variables. Prerequisite: Ma 201, Ma 222

Ma 441 TOPOLOGY 3-0-3

Introduction to general point set topology. Includes continuity, compactness, connectedness, and the separation axioms. Prerequisite Ma 201, Ma 222

Ma 480-489 INDEPENDENT STUDY Variable Credit

**Ed 305 PRACTICUM IN SECONDARY EDUCATION
MATHEMATICS 6-3-6 (See Education)**

(offered alternate years: Fall 1975)

DEPARTMENT OF MODERN LANGUAGES

BACHELOR OF ARTS

The Department of Modern Languages serves: 1) B.A. candidates with a major in languages, 2) students preparing for a teaching career in languages, 3) students whose degree programs require studies in languages, 4) students studying language to broaden their cultural background. The courses in languages and related subjects are designed to provide training in the language, literature, and civilization, whereby the student may gain an understanding and appreciation of the life and thought of the people.

B.A. with Major in Modern Language

The Department of Modern Languages offers instruction in French, German, Spanish, Italian, Russian, and Esperanto with majors in French, German, and Spanish. A major in the department may be met by one of the following: 30 credit hours in one language above 201-202 level; or 18 credit hours of a first language above 201-202 and 12 credit hours of a second language above 101-102. If Russian or Italian is taken as a second language, the 12 hours will include the elementary course. Language majors and students who have completed 202 or above are encouraged to participate in the Brethren Colleges Abroad.

Departmental majors must include the following courses: 302, 331, 321 (in the major language). A minimum of 15 hours above 201-202 must be taken in residence at Elizabethtown College. Students planning certification must complete 302 in each language.

Intermediate Proficiency by Examination

Upon successful completion of the Modern Language Association Cooperative Foreign Language test, a student may be exempted from the language requirement. This examination is administered during Freshman Orientation Week at a cost of \$10.00 per student. It may be taken at any other time during the college year for the general college fee of \$20.00; however, this examination may be taken only once in any one language. All students interested in studying languages in the department must take this examination to be placed in the course that he needs. NOTE: ANY STUDENT WISHING ADVANCED PLACEMENT MUST PASS THIS EXAMINATION.

Area of Concentration Option

Elementary education majors who elect modern languages for their area of concentration may take 18 hours including 101-102. Two languages may be used toward the concentration option provided that 301-302 is completed in one language.

Experimental Harrisburg Consortium 1975-76

The department has begun a cooperative program for the teaching of upper division language courses at the University Center, Harrisburg. The participating colleges along with Elizabethtown College are Lebanon Valley College, York College and Messiah College. This program allows students to take advantage of the faculties of other institutions and to take courses unavailable on our own campus. Transportation costs to and from the Center are provided for students and faculty.

COURSE OFFERINGS

Fr, Ge, Sp, Ru*, It*, Esp* 101, 102 3-1-3 each

An audio-lingual approach to the study of the structure of the language. Includes pronunciation, grammar and pattern drills and readings of selections to acquaint the student with the civilization. Credit will be granted for students who have studied this same language in high school provided that the proficiency test indicates poor background and the instructor in 101-102 feels that credit should be so granted.

Fr, Ge, Sp, Ru, It, Esp 201, 202 3-1-3 each

Further development of the skills of reading understanding, speaking and writing in the language. Supplementary laboratory practice. Review of fundamental grammar. Class conducted mainly in the language. Prerequisite: 102 or equivalent**

*Russian, Italian, and Esperanto offered upon sufficient student interest and availability of faculty.

**Equivalency is met by successful completion of at least two years of high school language; completing 101-102 with a passing grade; or passing successfully the MLA Cooperative Foreign Language test form LA (for one year college equivalency, administered like the MA form (see paragraph on intermediate proficiency by examination)).

Fr, Ge, Sp 203 CONVERSATION 3-0-3

A course designed to give the student an ease in conversing in the language and an introduction to literary genre. A more advanced development of the skills of writing, reading, listening, etc. This course will be conducted in the language only. Prerequisite: 202 or placement by proficiency test.

Fr, Ge, Sp 204 INTRODUCTION TO LITERATURE 3-0-3

A continuation of 203. Prerequisite: 203

Fr, Ge, Sp 301, 302 ADVANCED COMPOSITION AND CONVERSATION 3-0-3 each

A course designed to give the student opportunities and training in effective communication with some fluency. Intensive practice in speaking and writing everyday language, including a detailed study of the syntax, vocabulary building. Includes varied exercises, related translations and original compositions. Prerequisite: 202 or equivalent, or P.O.I. for 301; 204, 301 or equivalent, or P.O.I. for 302.

ALL COURSES NUMBERED ABOVE 302 HAVE A PREREQUISITE OF 302, ITS EQUIVALENT, OR P.O.I. Offered only upon sufficient enrollment and staff.

Fr, Ge, Sp 321 CIVILIZATION 3-0-3

An introduction to the significant periods of culture, their characteristics, and contributions. (Alternate years Spring 1976)

Fr, Ge, Sp 331 LINGUISTICS 3-0-3

A survey of linguistic methods as well as a study of phonetics; training in the improvement of pronunciation.

**ML, Fr, Ge, Sp 371-380 SPECIAL PROBLEMS
Variable Credit**

Courses designed to allow the student to pursue topics of special relevance not otherwise covered in the curriculum. Offered when student interest and faculty availability justify.

Fr, Ge, Sp 401, 402 SURVEY OF LITERATURE 3-0-3 Each

A survey of the major literary trends and a study of the major authors in the light of significant developments in history and civilization.

FRENCH**Fr 418 FRENCH LITERATURE OF THE MIDDLE AGES AND RENAISSANCE 3-0-3**

Prerequisite: Fr 302 or P.O.I.

Fr 421 FRENCH LITERATURE OF THE AGE OF LOUIS XIV 3-0-3

A survey of the Golden Age of French Literature, with special attention to Corneille, Racine, Molière, La Rochefoucauld, La Fontaine, and La Bruyère.

Fr 422 FRENCH LITERATURE OF THE AGE OF REASON 3-0-3

Readings and discussions of the "esprit philosophique" in the Age of the Enlightenment, as illustrated in the writings of Fontenelle, Montesquieu, Voltaire, Rousseau, and others.

Fr 431 FRENCH LITERATURE OF THE NINETEENTH CENTURY 3-0-3

Romanticism, Realism, and Symbolism with selections from the writings of Chateaubriand, Lamartine, Hugo, Flaubert, Balzac, Stendhal, Balzac, Verlaine, Rimbaud.

Fr 432 FRENCH LITERATURE OF THE TWENTIETH CENTURY 3-0-3

The more recent literary tendencies of France as exemplified in the poetry of Valéry, Apollinaire, Cocteau, Prévert; in the plays of Claudel, Giraudoux, Sartre; in the novels of Proust, Gide, Mauriac, Saint-Exupéry, Camus.

GERMAN**Ge 411, 412 GERMAN CLASSICISM AND ROMANTICISM 3-0-3 Each**

Reading of representative works of the period, with emphasis on authors such as Lessing, Goethe, Schiller and Heine.

Ge 413, 414 GERMAN DRAMA OF THE NINETEENTH AND TWENTIETH CENTURY 3-0-3 Each

A close examination of the dramas of Büchner, Grillparzer, Hebbel, Hauptmann, Brecht, Dürrenmatt, Frisch, and others.

Ge 417, 418 GERMAN LITERATURE SINCE GOETHE
3-0-3 Each

Reading and discussion of the works by German Realists, Naturalists, Impressionists. Expressionists and contemporary authors.

Ge 422 EARLY GERMAN LITERATURE 3-0-3

A survey of German literature from its beginning to the time of Goethe, with emphasis on the medieval epic and/or Baroque drama and poetry.

SPANISH

Sp 413, 414 SPANISH AMERICAN LITERATURE
3-0-3 Each

A survey of the major literary developments and study of the major authors of Spanish America from the conquest to the present time.

Sp 421 CERVANTES 3-0-3

A study of the man and his works; Don Quixote and its universal significance.

Sp 422 GOLDEN AGE OF DRAMA 3-0-3

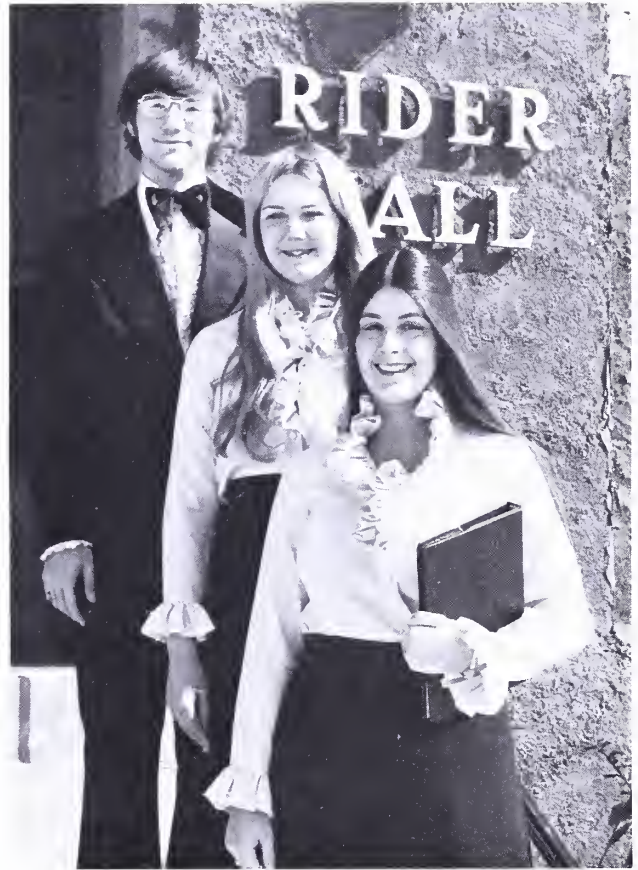
A survey of Spain's outstanding dramatists—Lope de Vega, Tirso de Molina, Ruiz de Alarcon and Calderon de la Barca.

Sp 432 CONTEMPORARY SPANISH LITERATURE
3-0-3

A study of the Generation of 1898, the figures who brought about a revival in Spanish critical thinking, and a study of the major literary trends up to the generations following the Spanish Civil War.

ML 387 PSYCHOLINGUISTICS 3-0-3

An introduction to the nature of language and its relation to human thought and communication. This course concerns the child's intuitive acquisition of syntax (generative grammar) as perceived by Noam Chomsky and his followers. Topics treated include aphasia (loss of speech), dialect investigation, phonology. Prereq. 202 or P.O.I.



Fr, Ge, Sp 481-490 INDEPENDENT READINGS
Variable Credit

Courses selected to fill the needs of individual seniors and to supplement their selection of courses. An opportunity for senior majors to undertake an independent project in some area of language or literature.

**ED 305 METHODS OF TEACHING FOREIGN
LANGUAGE** 4-0-4

An introduction to the principles of modern language teaching with emphasis upon the audio-lingual approach. See the Department of Education.

DEPARTMENT OF MUSIC

MUSIC: BACHELOR OF ARTS

MUSIC EDUCATION: BACHELOR OF SCIENCE

The Music Department's basic purposes are to develop students' comprehension and appreciation of music as a cultural force in the past and present, to prepare majors for professional careers as music educators and music therapists, and to offer a major within the B.A. degree for those students interested in a liberal arts education.

Required courses for the music education major are Music 101-102, Music 103-104, 201-202, 203-204, 231, 234, 245, 311, 312, 321-322, 343, 417, 419, 441-442, 471 or 472, a minimum of 12 hours of applied music instruction, a minimum of eight credit hours in ensemble participation, and Education 215. A minimum grade of C or above in all music courses and Education 215 is required for certification. Music education majors may elect a choral, instrumental or general emphasis, requirements of each varying slightly from the above. Program approval status has been granted by the Pennsylvania Department of Education.

Required courses for the music therapy major are Music 101-102, 103-104, 201-202, 203-204, 231, 234, 245, 291-292, 295, 298, 321-322, 343, 393-394, 398, 417, 419, 479, 491, 494, a minimum of twelve semester hours in applied music instruction and a minimum of six hours credit in ensemble. A grade of C or above in all music and music therapy courses is required. A six-month internship in an approved clinical facility is required for graduation after completion of the four-year program. Music therapy majors are encouraged to double major in music education.

Required music courses for the B.A. degree are normally Music 101-102, 103-104, 201-202, 203-204, 321-322, 417, 419, 441-442, 12 semesters credit in applied music and three hours of ensemble credit. The music requirements of the B.A. degree are flexible, according to the needs and interests of each student. Each major works out a program under the guidance of a departmental advisor which includes a minimum of 40 hours of music courses.

A copy of other departmental requirements for music majors, including proficiency requirements in piano and voice, and recital participation and attendance may be obtained from the Department Chairman's Office.

The Music Department has a Preparatory Department which offers instruction to pre-college students and adults. College students desiring to take instruction without credit may also enroll in the Preparatory Department. Instruction is available from qualified college student instructors and departmental faculty. Interested persons should check with the Music Department Chairman.

COURSE OFFERINGS

Music Courses

Mu 101-102 LITERATURE AND MATERIALS OF MUSIC 3-0-3 Each

The fundamentals of music theory, harmony, and form with emphasis on the development of analytical and compositional skills through the study of literature of all periods. Course includes integration of Music 103-104, but separate grades are given.

Mu 103-104 FUNDAMENTALS OF SIGHT-SINGING, EAR-TRAINING, AND KEYBOARD HARMONY 0-2-1 Each

Emphasis upon the development of visual and aural music skills through the study of music literature. Course is integrated with Music 101-102.

Mu 111-112 VOICE CLASS 0-2-1 Each

A basic study of the fundamentals of breath control, tone production and development of vocal technique. Open to all students.

Mu 113-114 PIANO CLASS 0-2-1 Each

The Class is designed to develop basic piano skills and knowledge of music theory fundamentals. Daily practice is required. Class enrollment is limited to twelve and offered only upon sufficient demand. Not open to music majors.

Mu 117-118 PIANO CLASS 0-2-1 Each

A class designed to develop basic piano skills. Open to music majors, and other students with permission of instructor.

Mu 201-202 ADVANCED LITERATURE AND MATERIALS OF MUSIC 3-0-3 Each

Advanced harmony, form, and analysis with emphasis upon music of the Renaissance, Baroque, Classical, Romantic, and Twentieth

Century. Creative projects are stressed. Course includes integration of Music 203-204, but separate grades are given.

Mu 203-204 ADVANCED SIGHT-SINGING, EAR-TRAINING, AND KEYBOARD HARMONY 0-2-1 Each

Continued emphasis upon the development of aural and visual skills. Course is integrated with Music 201-202.

Mu 231 BRASS CLASS 0-2-1

A course including the method of tone production, fingerings or positions, care and repair, and methods and materials for teaching trumpet or cornet, French horn, baritone, trombone, and tuba. Offered alternate years; Fall, 1976.

Mu 234 PERCUSSION CLASS 0-2-1

A course including the methods of tone production, care and repair, and methods and materials for teaching snare drum, cymbals, timpani, and other percussion instruments. Offered alternate years; Spring, 1977.

Mu 245-246 ELEMENTARY AND INTERMEDIATE STRING CLASS 0-2-1 Each

Courses including the method of tone production, fingerings, care and repair, and methods and materials for teaching violin, viola, violincello, and double bass.

Mu 291-292 INTRODUCTION TO MUSIC THERAPY 2-0-2 Each

A historical study of music therapy, a survey of its literature, current developments in the profession, and role of the therapist. For music therapy majors or P.O.I.

Mu 295 RECREATIONAL MUSIC 2-0-2

The use of recreational instruments and materials and techniques appropriate for use with handicapped persons.

Mu 298 CLINICAL EXPERIENCE I 0-40-1

Supervised field experience in an approved therapy clinical facility. Music therapy majors only.

Mu 311 MUSIC IN THE ELEMENTARY SCHOOL 3-0-3

A thorough study of objectives, methods, and materials for elementary school music programs through singing, instrumental, rhythmic, creative and listening activities. Detailed study and use of recent school music songbook series. Observations and laboratory experience included. Open to music majors or with P.O.I.

Mu 312 MUSIC IN THE SECONDARY SCHOOL 3-0-3

Methods and materials for secondary general music classes and performance groups, with special concentration on the junior high school general music class. Further attention, especially, is given to adolescent voice problems and the successful organization and direction of choral and instrumental performing groups. Observations and laboratory experience included.

Mu 315 HISTORY AND APPRECIATION OF MUSIC 3-0-3

A study of historical art periods with particular attention given to great composers and their outstanding compositions. (The primary purpose is to develop a standard of musical taste.) Non-credit for music majors.

Mu 321-322 CHORAL-INSTRUMENTAL CONDUCTING AND TECHNIQUES 3-0-3 Each

A course designed to give students knowledge and facility in directing choruses, bands, and orchestras. Conducting techniques, choral and instrumental methods and problems, score reading, and interpretation are included. Prerequisite Mu 204 or P.O.I.

Mu 325 TEACHING MUSIC IN THE ELEMENTARY SCHOOL-Lab 0-2-1

A course designed to develop the music skills for elementary education majors. The fundamentals of music theory, chording skills on piano, guitar, and autoharp, and music reading skills are included. The course may be exempted by proficiency exams.

Mu 326 TEACHING OF MUSIC IN THE ELEMENTARY SCHOOL 3-0-3

A study of the methods and materials for the elementary school teacher to use in a balanced elementary music program that includes rhythmic activities, singing, playing melody-harmony instruments and listening activities. The course covers the use of music in developing learning centers, ways of promoting indi-

vidual creativity, and how music may be integrated with other aspects of childhood education. Prerequisite: Music 325

***Mu 335 HISTORY OF JAZZ 3-0-3**

A course devoted to the exploration of the chronological development of jazz as an American art form, from Blues and Ragtime to Third Stream and current styles.

Mu 343-344 WOODWIND CLASS 0-2-1 Each

A course including the methods of tone production, fingerings, care and repair, and methods and materials for teaching flute, oboe, clarinet, bassoon, and saxophone. Offered alternate years: 1975-76.

Mu 345 ADVANCED STRING CLASS 0-2-1

A continuation of Music 246 with emphasis upon development of string techniques. Prerequisite: Mu 246.

Mu 371-380 SPECIAL PROBLEMS Variable Credit

This sequence of numbers permits the department to offer courses to any group of students who express an interest in a particular area of study not a regular part of the curriculum. Prerequisites are determined according to the nature of each specific course. Courses offered one year may or may not be offered in subsequent years.

Mu 393-394 PSYCHOLOGICAL FOUNDATIONS OF MUSIC 2-0-2 Each

A study of the psychological and physical effects of music, therapeutical research methods and their application.

Mu 398 CLINICAL EXPERIENCE II—MUSIC THERAPY 0-40-1

Supervised field experience in an approved therapy clinical facility. Music therapy majors only.

***Mu 415 CLASSICAL-ROMANTIC MUSIC LITERATURE 2-0-2**

A survey of instrumental and vocal music of the Classical and Romantic periods. Prerequisite: Mu 202, or Mu 315, or P.O.I.

Mu 417 IMPRESSIONISTIC-MODERN MUSIC LITERATURE 2-0-2

A survey of music from Impressionism to the present avant-garde styles. Prerequisite: Mu 202 or Mu 315, or P.O.I. Offered alternate years; 1975-76.

Mu 419 COUNTERPOINT 2-0-2

A course emphasizing contrapuntal techniques of the 16th and 18th centuries through representative composers and original compositions. Prerequisite: Mu 202 Offered alternate years; 1976-77.

***Mu 440 BAND AND ORCHESTRA ARRANGING 2-0-2**

A course designed to develop the ability to compose or adapt music for concert or marching bands and orchestras. A study of instrument ranges, limitations, and uses and effects in various combinations is included. Prerequisite: Mu 202 or P.O.I.

Mu 441-442 HISTORY OF MUSIC 3-0-3 Each

A comprehensive survey of Western music from ancient to modern times. The course includes the evolution of musical forms, styles, and media through careful consideration of music literature and the relation of musical to cultural and historical development. Open to music majors or with P.O.I. Mu 442 may be taken prior to Mu 441.

***Mu 451-452 PIANO METHODS AND MATERIALS 2-1-2 Each**

This course acquaints the pianist with modern methods of piano teaching of children, youth, and adults, and includes a survey of teaching materials for various stages of progress. Teaching demonstrations and experience will be a part of the course. Prerequisite: Two semesters of Mu 451. Offered 1975-76.

Mu 471 or 472 STUDENT TEACHING IN MUSIC 8, 10, or 12

Includes teaching experience in both elementary and secondary music classes. Instrumental and vocal experiences may be arranged. Prerequisite: Mu 231, Mu 234, Mu 311, Mu 312, Mu 321-322, Mu 341, Mu 343-344

*Contingent upon sufficient enrollment and availability of staff.

Mu 479 PROFESSIONAL INTERNSHIP IN MUSIC THERAPY

Six months of supervised practical experience with certified music therapist in approved facility. Can be taken only after completion of all other music therapy degree requirements. P.O.I.

Mu 481-490 INDEPENDENT STUDY Variable Credit

The purpose of this class is to offer individual students opportunities for musical composition, arranging, or research under faculty supervision. P.O.I.

Mu 491 INFLUENCE OF MUSIC ON BEHAVIOR 3-0-3

A study of music's affect upon the human mind and body from a psychological, sociological, and biological point of view. Prerequisites: Mu 102, Psychology 105, Biology 103

Mu 494 MUSIC IN THERAPY 3-0-3

The theory and techniques of using music therapy in the treatment of the mentally and physically handicapped. Prerequisites: Mu 393 or 491.

APPLIED MUSIC AND MUSICAL ORGANIZATIONS**Mu 241 VOICE ½-5-1****Mu 251 PIANO ½-5-1**

Students with no piano background or limited background will be enrolled in piano class for one or more semesters before enrolling for private piano lessons. Music majors will register for Music 117, non-music majors will register for Music 113.

Mu 261 ORGAN ½-5-1**Mu 271 VIOLIN ½-5-1****Mu 272 VIOLA ½-5-1****Mu 273 CELLO ½-5-1****Mu 274 STRING BASS ½-5-1****Mu 275 GUITAR ½-5-1****Mu 276 FLUTE ½-5-1****Mu 277 CLARINET ½-5-1****Mu 278 OBOE ½-5-1****Mu 279 BASSOON ½-5-1****Mu 280 SAXOPHONE ½-5-1****Mu 281 TRUMPET/CORNET ½-5-1****Mu 282 FRENCH HORN ½-5-1****Mu 283 TROMBONE ½-5-1****Mu 284 BARITONE ½-5-1****Mu 285 TUBA ½-5-1****Mu 286 PERCUSSION ½-5-1**

Students in Applied Music are advanced as rapidly as their ability permits. The study of technical exercises and literature from various music periods and styles is essential in all applied areas. To receive credit in music ensembles, attendance at rehearsals and public performances must meet standards established by the faculty director. Students may register for music ensembles with or without credit. In addition to the established ensembles, other ensembles may be organized under faculty supervision and offered for credit. All ensembles may be repeated for credit.

Mu 360 COLLEGE CHORALE 0-1-½

Members of the College Chorale are selected by audition. The ensemble offers specialized study and performance opportunities for vocally advanced students.

Mu 361 CONCERT CHOIR 0-3-1

Open to any student—acceptance based upon audition by appointment. In addition to campus and television performances prior to Christmas and participation in the annual Spring Concert, this group sings approximately twenty concerts in churches and schools in Pennsylvania and neighboring states each spring.

Mu 362 CHORAL UNION 0-2-1 $\frac{1}{2}$

Open to any student without requiring an audition, a mixed choral group whose purpose is to experience a variety of sacred and secular selections, culminating in several public performances each year.

Mu 363 WOODWIND CHOIR 0-1-1 $\frac{1}{2}$ **Mu 364 BRASS ENSEMBLE 0-1-1 $\frac{1}{2}$** **Mu 365 ORCHESTRA 0-1-1 $\frac{1}{2}$** **Mu 366 PIANO ENSEMBLE 0-1-1 $\frac{1}{2}$**

The Piano Ensemble exists for giving students the opportunity of sight-reading, learning, and occasionally performing works for more than one pianist.

Mu 367 STRING ENSEMBLE 0-1-1 $\frac{1}{2}$

String Ensemble is open to any student subject to approval by the director. Students study and perform string ensemble literature from the baroque to contemporary periods.

Mu 368 STAGE BAND 0-1 $\frac{1}{2}$ -1 $\frac{1}{2}$

The Elizabethtown College Stage Band serves as an integral part of the college curriculum. It functions as a lab-band and as a touring band playing the best in swing and jazz with the big band sound. Their program of music includes swing, pop tunes, ballads, and jazz including old standards and current progressive jazz.

Mu 369 CONCERT BAND 0-3-1

Open to any qualified student—acceptance subject to approval by director. Performances include the annual Winter and Spring concerts, plus a number of off-campus appearances.



DEPARTMENT OF OCCUPATIONAL THERAPY

BACHELOR OF SCIENCE

The study of occupational therapy seeks to prepare the student to: a) understand and appreciate the cognitive, cultural, physical, psychological, and social processes involved in the developmental stages of the human being; b) provide treatment to those persons whose abilities to cope with life are impaired by cultural and developmental deficits; and c) continue with graduate study. Requirements for B.S. in Occupational Therapy

A. Required courses for the major are: O.T. 113-114, 213, 214, 215, 216, 225, 302, 307, 311, 313, 314, 317-318, 412, 413, 417-418. Students must also complete the related requisites of: Ch 101, 104; Bio 103, 217, 318; Psych 105, 225, 226; An 202 or An 211; Soc 340 or Com 302. Recommended courses: MA 151, Psych 232 or 322.

B. Field-Work Education

Recommended that student pursue uninterrupted course of four-year study and complete six to eight months field work. Six months field work experience is minimal requirement stated in essentials of American Occupational Therapy Association. At Elizabethtown College, following format suggested:

- 3—full month period (daily basis) in field work during Spring Semester of Junior Year or Summer between the Junior and Senior Year.
- 3—full month period (daily basis) in field work following completion of Senior Didactic Studies.

(Optional)

- 2—full month (daily basis) in field work—the student may elect to pursue field work in a particular area of choice (e.g. Specialty Areas: Child Psychiatry, Mental Retardation, Neurophysiology, Advanced Psycho/Social and Physical Rehabilitation, Research, Administration, Education).

C. National Registry Examination

Upon the institutional accreditation by the American Occupational Therapy Association and the American Medical Association, the student will sit for a national registry examination, which is held twice a year on the last Friday of the months of June and January.

D. Administration Requirements for Program:

1. Prior to Admission into the Program:

The student will have an interview with a member of the occupational therapy department in order to determine eligibility.

2. Evaluation after Admission into Program:

Students will be evaluated by a faculty evaluation committee at the conclusion of each academic year. If it is the consensus of the committee that a student is not suitable academically or professionally for the area of study, he will be withdrawn from the program. Standards which are to be maintained by the student in order to remain in the program are:

- a. Students must have at least a 2.5 average in all of the major's required courses (both the occupational therapy and the related requisites).
- b. Students must satisfactorily meet the standards and requirements in all phases of field-work education (including clerkship, laboratory, field-work experience).

Program subject to revision during 1975-77.

COURSE OFFERINGS

O.T. 113-114 BASIC CONCEPTS IN OCCUPATIONAL THERAPY 2-3-3

Introduction to theoretical basis for practice of occupational therapy. Meaning of purposeful and creative activities to human beings throughout history discussed. Anthropological viewpoint shared. Use of activity to foster normal development and to treat emotional and social dysfunction. Related field trips.

O.T. 213, 214, 215, 216 LIFE TASKS: BASIC MATERIAL CULTURE 1-6-1.5, P.O.I

Introduction to media (Textiles-213, Pottery-214, Graphics-215, Wood-216) basic to humans throughout history. An examination and study of creative, cultural, and therapeutic value of media when applied to health-care treatment setting. Analysis of activities and problem-solving emphasized. (213-214 Fall; 215-216 Spring)

O.T. 225 HUMAN DEVELOPMENT 0-2-1

Refer to Psych 225 for lecture description. O.T. Laboratory: Emphasis on physical, cognitive, emotional, social areas in early developmental years. Co-Requisite: Psy 225

O.T. 302 NEURO-BEHAVIORAL SCIENCE I: NEUROLOGY 3-0-3

Review: basic neuro-anatomy, neuro-physiology. Emphasis: functional neuronal systems; motor, sensory, limbic with associated behavioral correlate and higher cortical functions. Prerequisite: Bio. 217, 318 (Fall)

O.T. 307 PERSPECTIVES IN PEDIATRICS 2-2-3

Overview of pediatric conditions with emphasis on Occupational Therapy methods and theories. The therapeutic relationship with children from birth to puberty stressed. Prerequisite: Psy 225 or P.O.I. (Spring)

O.T. 311 NEURO-BEHAVIORAL SCIENCE II: PSYCHIATRY 2-2-3

Behavioral approach to the study of psychiatric, neuropsychiatric disorders, and community problems. Intervention and prevention prime treatment approaches. (Fall)

O.T. 313 LIFE TASKS: ADVANCED CONCEPTS WITH MATERIAL CULTURE 2-2-3

Skills selected for further exploration: Self-care, group work, communication or creative skills. Teaching methods, problem-solving, therapeutic value of activities stressed. Prerequisite: O.T. 213, 214, 215, 216 (Fall)

O.T. 314 KINESIOLOGY 2-2-3

Understanding functional anatomy emphasizing normal and abnormal human motion. Analysis of functional anatomy correlated

with cultural, mechanical, psychological, physiological principles. Prerequisite: O.T. 113-114; Bio. 217

O.T. 317 PSYCHO-SOCIAL REHABILITATION 3-8-4

Examining major psychiatric concepts relevant to occupational therapy: primary emphasis: theory application utilizing evaluation tools, goal planning, activities analysis, treatment techniques. Prerequisite: Psy 225.

O.T. 318 PHYSICAL REHABILITATION 3-8-4

Evaluation techniques and therapeutic remediation of individuals with physical dysfunction. Activity analysis. Daily living activities. Prosthetics and orthotics. Clinical experience. Prerequisite: Bio. 217, 318; O.T. 225, Psy 225, or P.O.I.

O.T. 412 SENIOR PRACTICUM 1-4-3

Designed to offer student the opportunity to conduct scholarly research experiment within area of major. Prerequisite: O.T. 317-318.

O.T. 413 SENSORY INTEGRATION 3-4-4

Comprehensive study of sensory integration of the CNS: Standardized evaluation procedures, syndromes of dysfunctions, remediation techniques within a developmental framework. Prerequisite: Psych 225; O.T. 302, 307, 317-318, or P.O.I.

O.T. 417-418 ADVANCED CONCEPTS IN O.T. AND HEALTH-CARE 2-2-2

Students will explore and attempt to problem solve various advanced concepts within occupational therapy and other health related professions. Modules in health-care systems (community, state, federal, international), administration, legislation, tests and measurements, pre-vocational exploration, bio/feedback mechanisms presented.

DEPARTMENT OF PHYSICAL EDUCATION AND HEALTH

The Department of Physical Education and Health affords an opportunity for all students to develop an interest in play and recreation that will be fun and worthwhile to them during college and later life. We strive to develop social and moral standards such as sportsmanship, teamwork, tolerance, and other character benefits which come from properly conducted play.

All students at Elizabethtown College are required to take four semester hours of physical education courses. This requirement includes at least one semester of an aquatics activity. This requirement can be waived by successful completion of a proficiency test. Two of the four semester requirements may be taken in aquatics. The remaining physical education requirements may be satisfied by electing from any of the courses offered except PE 270, PE 275, and PE 285.

COURSE OFFERINGS

PE 105 BEGINNING SWIM (Women) 0-2-1

Instruction for non-swimmers of the basic strokes on an elementary level.

PE 115 INTERMEDIATE SWIMMING (Women) 0-2-1

Instruction and techniques of the basic strokes—survival swimming and water safety.

PE 125 BEGINNING SWIM (Men) 0-2-1

Instruction for non-swimmers of the basic strokes on an elementary level.

PE 135 INTERMEDIATE SWIM (Men) 0-2-1

Instruction and techniques of the basic strokes—survival swimming and water safety.

PE 145 FIELD HOCKEY—VOLLEYBALL (Women) 0-2-1

Rules, playing techniques, and skill development.

PE 155 TENNIS—BOWLING (Coed) 0-2-1

Rules, playing techniques and skill development.

PE 165 GOLF—BADMINTON (Coed) 0-2-1

Rules, playing techniques and skill development.

PE 185 BASKETBALL (Women) 0-2-1 (Spring)

Rules, playing techniques, and skill development.

PE 195 BASKETBALL—SOCCER (Men) 0-2-1 (Fall)

PE 205 ARCHERY—BADMINTON (Coed) 0-2-1

Rules, playing techniques and skill development.

PE 210 BASKETBALL (Men) 0-2-1 (Spring)

PE 215 SPORTS APPRECIATION (Coed) 2-0-1

To develop an awareness of the role played by sports, as a viable part of our society.

PE 217 SENIOR LIFE SAVING 0-2-1

Knowledge and practice in life saving, water safety and pool management. Meets Red Cross certification requirements. Graded H-P-NP

PE 218 WATER SAFETY INSTRUCTION (Coed) 0-2-1 Prerequisite: current Senior Life Saving Certificate.

Advanced skill in life saving, swimming instruction and use of pool equipment. Meets Red Cross Water Instructor certification requirement. Graded H-P-NP

PE 220 WATER SPORT—SOFTBALL (men) 0-2-1 (Spring)

Introduction to water sports. Rules, playing techniques.

PE 225 TENNIS (Women) 0-2-1 (Fall)

Rules, playing techniques and skill development.

PE 235 TENNIS (Men) 0-2-1 (Fall)

Rules, playing techniques and skill development.

PE 240 BOWLING 0-2-1

Rules, playing techniques and skill development.

PE 245 HANDBALL—PADDLEBALL (Women) 0-2-1

Rules, playing techniques and skill development.

PE 250 VOLLEYBALL (Coed) 0-2-1

Rules, playing techniques and skill development.

PE 255 HANDBALL—PADDLEBALL (Men) 0-2-1

Rules, playing techniques and skill development.

PE 265 PHYSICAL CONDITIONING (Coed) 0-2-1

Techniques of exercise, jogging, weight-training, and body development.

PE 150, PE 160, PE 260**ADAPTED PHYSICAL EDUCATION 0-2-1**

Individual activity or corrective exercises adapted to the needs and abilities of the student. Entry is dependent upon recommendation of a physician. Graded H-P-NP

PE 270 ADVANCED INDIVIDUAL SPORTS 3-0-3

Methods, techniques and teaching skills in selected sports. Taught summer session only.

PE 275 CONTEMPORARY HEALTH PROBLEMS 3-0-3

A study of the physical, mental and social aspects of personal and community health problems in the contemporary setting. Educational principles applied to teaching in the elementary school situation.

PE 285 PHYSICAL EDUCATION FOR THE ELEMENTARY SCHOOL CHILD 3-0-3

A study of physical growth of children from ages 4-12, and consideration of games and activities appropriate to physical development of the child in the elementary grades.

**PE 295 INTRODUCTION TO BODY MOVEMENT AND DANCE FORM (Coed) 0-2-1**

Disciplines of ballet and muscular control.

PE 370-380 SPECIAL TOPICS IN PHYSICAL EDUCATION (Coed) 0-2-1

These courses may include such physical activity courses as horsemanship, trap shooting, skiing, etc. for which there will likely be an extra charge.

PE 482-490 SELF-DIRECTED PHYSICAL EDUCATION ACTIVITY One Credit

Designed for the student attending night school division, studying abroad, or for extenuating circumstances which prohibit the student from meeting regularly scheduled physical education classes.

DEPARTMENT OF PHYSICS AND EARTH SCIENCE

BACHELOR OF SCIENCE

By means of varied learning situations, the department offers both professional and liberal arts oriented studies designed to prepare students for one or more of the following: 1) graduate school; 2) employment in industry; 3) secondary school teaching; 4) engineering (see below); 5) understanding of the physical universe. Together with formal course instruction, additional learning may come about through use of well equipped labs, a large capacity digital computer, machine shop, and planned and unplanned encounters with qualified faculty and students.

B.S. with Major in Physics

There are two options available: option I for the student interested in graduate school or industrial work, and option II for the student interested in teaching Physics at the secondary level. Phy 232, Phy 343, Phy 404, Ch 104, Ma 222 are required for both options.

Option I: Phy 306, Phy 344, Phy 345, Phy 403, Phy 408, Phy 490, six credits of electives from Ma 201, Ma 321, Ma 322, Ma 351 and Ma 362.

Option II: Bio 103, Bio 104, CS 105; and six credits of electives from the offerings of the department of Physics and Earth Sciences.

Cooperative Engineering Major

Upon successful completion of this five-year program, the student will receive a B.A. degree from Elizabethtown College and a B.S. degree from the Pennsylvania State University. The last two years of the program will be taken at The Pennsylvania State University, at State College, Pa.

Curricula which Elizabethtown College students will be qualified to enter at The Pennsylvania State University include aeronautical, civil, electrical, industrial, mechanical, environmental and others. In order to be eligible for admission to The Pennsylvania State University the student must have a 2.0 cumulative average for course work at Elizabethtown College and be recommended by Elizabethtown College. Students who have studied at The Pennsylvania State University prior to matric-

ulation at Elizabethtown College must have a quality point average of at least 2.5 for all college work taken.

At Elizabethtown College the student will complete Phy 232, Dr. 116, Ma 222, Ma 321, Ch 104, Phy 306 and other courses. Full information is available from the department.

Secondary General Science Certification

The teaching certificate program in general science with a physics concentration requires: Phy 132, 231, 232, 343, 404, and any other courses numbered with the prefix Phy or Dr.

The teaching certificate program in general science with an earth science concentration requires: ES 107, 108, 111, 112, 202, 203, 301, 302, 303, and 401.

PHYSICS COURSE OFFERINGS

Phy 111 INTRODUCTION TO PHYSICS 3-2-4

An introduction to the concepts of physics through a study of the laws of motion, energy, electricity, light, relativity, radioactivity and other topics of interest. (fall)

Phy 112-211 GENERAL PHYSICS I and II 3-2-4 Each

A comprehensive study of the principles of physics with applications. Topics of heat, light, electricity, radioactivity, optics, equilibrium, and motion will be treated. A course for those not planning further studies in Physics. Prerequisite: Ma 101 (spring and fall)

Phy 132, 231, 232 COLLEGE PHYSICS I, II and III 3-2-4 Each

A unified study of the laws of mechanics, thermodynamics, wave theory electric and magnetic fields, and optics, and their applications, utilizing differential and integral calculus. A course for those planning a career in, or the teaching of, the physical sciences. Corequisites: Ma 121, 122, 222 respectively (spring, fall, spring)

Phy 305-306 INTRODUCTION TO THEORETICAL MECHANICS 3-0-3 Each

A study of force, acceleration, work, energy, impulse, momentum, stress and strain. Linear and rotary motion will be analyzed in-

cluding the use of various types of reference coordinates and vector analysis. Prerequisites: Phy 232, Ma 222 (fall, spring)

Phy 343 INTRODUCTION TO QUANTUM THEORY 3-0-3

An introduction to the principles of quantum theory, radiation, atomic spectra, and the extranuclear structure of the atom. Prerequisites: Phy 232, Ma 222 (fall)

Phy 344 MODERN PHYSICS 3-0-3

An introduction to nuclear and atomic processes. Radioactivity, the nuclear force, nuclear interactions, quantum statistics, solid state applications and elementary particles will be studied. Prerequisite: Phy 343 (spring)

Phy 345 ADVANCED PHYSICS LABORATORY 0-5-2

An advanced laboratory with experiments in modern physics, electricity and magnetism, optics and thermodynamics. Students will be exposed to a variety of experimental techniques. Prerequisite: Phy 343 (spring)

Phy 371 ANALOG COMPUTER PROGRAMMING 2-0-2

A self-paced course in solving differential equations using the analog computer including a study of amplitude and time scaling. Graded Honors-Pass-No Pass (offered for individuals or groups by request) Prerequisite: P.O.I.

Phy 403 KINETIC THEORY AND THERMODYNAMICS 3-0-3

A study of the kinetic theory of matter, statistical mechanics, and the principles of thermodynamics including temperature, heat, work, internal energy, entropy, and enthalpy. Prerequisites: Phy 232, Ma 222 (Alternate years; Fall, 1975)

Phy 404 ELECTRONICS 3-3-4

The basic components of electronic circuits will be studied, including vacuum tubes, transistors, diodes and integrated circuits. Fundamental circuits will be analyzed. Prerequisites: Phy 232 (fall 1976 and alternate years)

Phy 407-408 ELECTRICITY AND MAGNETISM 3-0-3

The theory of the static and dynamic forces and fields associated with basic particles, electrical components, measurements, alternating current, radiation, Maxwell's equations and special relativity. Prerequisite: Phy 232 (fall and spring)

Phy 490 SEMINAR 2-0-2

Experimental or theoretical study under the direction of a staff member. A formal report of work will be required. P.O.I. will be granted only after a written proposal of study is received and accepted by a faculty member in the department.

Phy 481-489 INDEPENDENT STUDY Variable Credit

Study and experimentation in an area of interest to the student and faculty member. Prerequisite: P.O.I.

Dr. 115-116 DRAWING AND DESCRIPTIVE GEOMETRY 1-5-2

A study of reference planes, points, lines, curved surfaces, revolutions, true sizes, intersections, orthographic projection, isometric drawing, auxiliary views, sections, and developments. Fall and spring 1976-77 & alternate years

Ed. 305 PRACTICUM IN SECONDARY EDUCATION, SCIENCE 6-3-6 (see Education)

EARTH SCIENCES COURSE OFFERINGS

ES 105 FIELD EARTH SCIENCE 8

An intensive introductory program of field and laboratory studies emphasizing in situ instruction. Included are geologic and topographic mapping and inquiry oriented investigations of the earth and atmosphere. Prerequisite: P.O.I. (Offered only in Summer Sessions)

ES 107 ASTRONOMY 3-2-4

General principles of solar system and stellar astronomy. Labs provide practical experience in determining astrometric quantities. (Fall)

ES 108 METEOROLOGY 3-2-4

General studies of causes, effects and distribution of atmospheric phenomena. Labs include collection and analysis of weather and climatic data. (Spring)

ES 111 PHYSICAL GEOLOGY 3-2-4

The study of the physical Earth incorporating its materials, processes, and forms. Among the subjects included are minerals, rocks, volcanoes, glaciers, earthquakes, and continental drift. (Fall and Spring)

ES 112 HISTORICAL GEOLOGY 3-2-4

The study of the history of the Earth and its life forms as well as the methods utilized to decipher the Earth's past. Prerequisite: ES 111 (Spring)

ES 202 GEOMORPHOLOGY 2-0-2

The study of landforms, their distribution, origin, and classification. Landforms of North America are emphasized with the use of topographic maps and air photographs. Prerequisite: ES 111 (Offered alternate years: Spring 1976)

ES 203 PALEONTOLOGY 1-2-2

Principles of classification and time referenced changes of prehistoric life. Labs include studies in morphology and identification of invertebrate fossil forms. Prerequisite: ES 112 (Offered Alternate Years: Fall, 1976)

ES 301 MINERALOGY/PETROLOGY 2-2-3

An introduction to systematic crystallography and mineralogy, stressing identification and associations. Igneous and metamorphic petrology includes genetic processes and microscopic and hand specimen petrography. Prerequisites: ES 111 (Fall)

ES 302 SEDIMENTOLOGY 2-2-3

Processes of sedimentation in space and time. Laboratory techniques and sedimentary petrology are supplemented with extensive field studies of Paleozoic through Recent deposits. Prerequisite: ES 112 (Offered alternate years: Fall, 1975)

**ES 303 GEODYNAMICS 2-2-3**

Studies of deformational processes of the Earth and resulting geologic structures. Solid-earth geophysics and global tectonics are studied. Prerequisites: ES 111 (Spring)

ES 401 SEMINAR 1-0-1

Readings and discussions of selected topics in the earth sciences are required. Prerequisite: Six credits above 100 level courses. (Offered on demand)

ES 481-490 INDEPENDENT STUDY Variable Credit

Students are required to define and do significant research on a problem in the earth sciences. Prerequisite: Six credits above 100 level courses and P.O.I.

DEPARTMENT OF POLITICAL SCIENCE

BACHELOR OF ARTS

The department aims to assist the student in thinking rationally about political questions through training in normative, empirical, and policy-oriented approaches to matters of public policy which he will face as a political analyst, administrator, businessman, lawyer, educator, or citizen. A major in political science serves as preparation for graduate or law school, or a career in governmental administration, teaching, regional and urban planning, research, and the diplomatic service, among others.

A.B. with Major in Political Science

Required courses are those comprising the principal subfields of the discipline: PS 117 and 118, 205, 302, 304, 310, and 398. The remaining 12 hours may be chosen from any combination of departmental offerings for a total of 33 hours.

Social Science Comprehensive Programs in Political Science

Prospective secondary education teachers wishing certification in Social Science with a Political Science major are required to take the following courses for a total of 24 hours: PS 117 and 118, 205, 302, 304, 305 or 310, 398, and an elective. Certification with a minor requires PS 117 and 118, 205, and an elective for a total of 12 hours. The interdisciplinary Social Science program requires the following: Major of 24 hours—PS 117 and 118, 205, 302, 304, 305 or 310, 398, and an elective. Minor of 15 hours—PS 117 and 118, 205, 302, and an elective. Those taking only three hours should take PS 117.

COURSE OFFERINGS

PS 105 INTRODUCTION TO GOVERNMENT 3-0-3

The functions of government and differing types of government, emphasizing the relationship existing between the individual and government in democratic, authoritarian, and totalitarian systems.

PS 117-118 AMERICAN POLITICAL INSTITUTIONS I AND II 3-0-3 Each

Evolution of U.S. political institutions since independence, with emphasis on current issues. First semester includes national

executive, legislative, and judicial branches. Second semester covers public opinion, elections, ethnic politics, federalism, and the political process at state and local levels.

PS 205-206 INTERNATIONAL RELATIONS I AND II 3-0-3 Each

First semester surveys political, economic, legal, psychological and military features of international relations with consideration of national interest, foreign policy, diplomacy, alliances, and balance of power. (Fall and Spring). Second semester is a comparative study of foreign policy of major and developing powers on current issues. (Spring)

PS 302 POLITICAL THEORY 3-0-3

Analysis of the development of significant political ideas from the Greek city-state to the present. (Spring)

PS 304 COMPARATIVE GOVERNMENTS 3-0-3

Structural-functional comparison of political systems of selected foreign nations, emphasizing party systems, political cultures, and executive-legislature relations in the context of historical development. (Fall)

PS 305 POLITICAL PARTIES AND INTEREST GROUPS 3-0-3

Basic definitions and popular stereotypes, the practical functioning framework, organization and operation, and major problems in contemporary American party politics. Prerequisite: PS 117 or 105. (Fall)

PS 310 PUBLIC ADMINISTRATION 3-0-3

Administrative organization, personnel administration, decision-making, and communications. Emphasis on relationship of administrative bureaus to the public, executive office, legislative, and judiciary. (Spring)

PS 322 LATIN AMERICAN POLITICS 3-0-3

Political culture and processes, with country studies and developmental models to illustrate diverse political styles and approaches to current issues. (Fall)

PS 342 POLITICS OF DEVELOPING NATIONS
3-0-3

Interdisciplinary theories of political development analyzed and applied in specific case studies of contemporary nation-building in transitional societies. (Spring)

PS 370-379 SPECIAL PROBLEMS 3-0-3

Readings and discussions in topical areas and problems of political science, with subjects chosen in accord with student demand.

PS 398 JUNIOR SEMINAR 3-0-3

A study of techniques of empirical political research and development of modern methods of analysis and data presentation in political science, with reference to contributions from other social sciences. A major research project on methodology is required. (Spring)

PS 405 CONSTITUTIONAL LAW 3-0-3

History and development of the Constitution. Leading decisions of the Supreme Court evaluated with emphasis on current decisions and cases in the light of history and possible future trends. (Fall and Spring)

PS 470 CAPITOL SEMESTER INTERNSHIP
6 Credits

Applied field experience in public administration as a junior assistant in the daily operations of state or local government agencies. (Fall)

Ps 480-489 INDEPENDENT STUDY
Variable Credit

Designed to offer independent study to advanced students making use of techniques of political science in specific problem areas not included in the department's regular offerings.



DEPARTMENT OF PSYCHOLOGY

BACHELOR OF ARTS

The Psychology Department aims to nurture in the student both the sensitivity of human understanding and skills of scientific thought. It helps the student acquire the content and methods for describing, predicting and understanding behavior in order to prepare him for careers in human services or graduate and professional training in education, counseling, religion, business, and clinical and experimental psychology.

Required courses for the psychology major are Psychology 105, 213-214, 313, 314, 321, 401, one of 413, 414, and 416, and psychology electives for a minimum of 33 semester hours. Students must also complete Bio. 103 and 104.

Required courses for comprehensive social science major with a psychology major are Psychology 105, 213, 214 and 13 additional hours in psychology; with a psychology minor, Psychology 105 and electives to meet the prescribed number of credit hours.

COURSE OFFERINGS

Psy 105 GENERAL PSYCHOLOGY 3-0-3

An introduction to the study of behavioral science including consideration of motivation, learning, emotions, personality, and sensory and perceptual processes.

Psy 205 EDUCATIONAL PSYCHOLOGY 3-0-3

The application of the principles of psychology to the problems of learning and teaching including a study of classroom situations. Prerequisite: Psy. 105

Psy. 211 INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY 3-0-3

An introduction of the principles of psychology to the problems of people at work including topics of personnel selection, training, performance evaluation, motivation, and human factors research. Prerequisite: Psy. 105

Psy. 213-214 MODES OF PSYCHOLOGICAL INQUIRY I AND II 3-2-4 Each

Training in the formulation, evaluation, and communication of problems of psychological interest including the study of experimental design, statistics, theory formulation and evaluation, and the philosophy of science. Prerequisite: Psy. 105 (Psy. 213, Fall; Psy. 214, Spring)

Psy 225-226 HUMAN DEVELOPMENT I and II 2-1-3; 3-0-3

A study of life-span developmental processes including principles of ontogenetic development, acquisition of cognitive competency, socialization processes, normative trends of physiological and emotional growth. First semester covers prenatal development to adolescence; second semester, adolescence through old age. Prerequisites: for Psy. 225: Psy 105 or Soc 101; for Psy. 226: Psy 225 or parallel course in other dept.

Psy 232 SOCIAL PSYCHOLOGY 3-0-3

An introduction to the application of psychological principles in the understanding of social phenomena, including social structure, the socialization of the child, interpersonal processes, and group processes. Prerequisite: Psy 105

Psy 313 STATISTICS 3-0-3

A continuation of Psy 213, emphasizing analysis of variance, varieties of correlation, errors of measurement, and selected non-parametric procedures. Prerequisite: Psy 213 (Spring)

Psy 314 EXPERIMENTAL PSYCHOLOGY II: LEARNING 3-2-4

Study of major theories, methods, and empirical findings in the area of both human and animal learning. Students conduct various animal conditioning experiments. Prerequisites: Psy 214 (Fall)

Psy 321 PERSONALITY: THEORY AND RESEARCH 3-0-3

An critical survey of theories of personality including a study of their origin, related research, and application to understanding personality development. Prerequisite: Psy 105 (Fall)

Psy 322 ABNORMAL PSYCHOLOGY 3-0-3

Consideration of neurosis, psychosis, and personality disorders—their origin, treatment, prognosis, and prevention. Attention is given to the adequacy of adjustment of both normal and deviant behavior. Prerequisite: Psy 105 (Spring)

Psy 333 TESTS AND MEASUREMENTS 2-2-3

An introduction to standardization, validity, and reliability of psychological tests, including the study of standardized tests, and their interpretation. Prerequisite: Psy 105 (Offered alternate years: Spring 1977)

**Psy 370-379 SPECIAL PROBLEMS
IN PSYCHOLOGY Variable Credit**

Directed study in topics not otherwise covered in the curriculum. Offered when student interest and faculty availability justify. Prerequisite: P.O.I.

**Psy 401 HISTORY AND SYSTEMS
OF PSYCHOLOGY 3-0-3**

A study of major historical systems in psychology, including the evolution of various positions in contemporary psychology and attempts to reconcile these positions. Prerequisite: Psy 214 (Fall 1976)

**Psy 413 EXPERIMENTAL PSYCHOLOGY III:
PERCEPTION 3-0-3**

A study of problems and theories of sensory and perceptual functioning. Students may be asked to conduct laboratory studies. Prerequisite: Psy 214 (Fall 1976)

**Psy 414 EXPERIMENTAL PSYCHOLOGY IV:
COGNITION 3-0-3**

A study of selected investigations in memory, attention, information processing, and thought. Students may be asked to conduct laboratory studies. Prerequisite: Psy 214 (Spring 1976)

**Psy 416 EXPERIMENTAL PSYCHOLOGY V:
MOTIVATION 3-0-3**

A study of various topics within the field of motivation. Psychological as well as physiological data will be considered. Prerequisite: Psy 214 (Fall 1975, Spring 1977)

**Psy 471-472 FIELD STUDY Variable Credit (2-6)**

Supervised training and experience in a professional setting related to psychology plus individual meetings and seminars with faculty. Placement depends on the student's interests and professional goals. Prerequisite: P.O.I.

Psy 473-474 RESEARCH PRACTICUM Variable Credit

Research in psychology under the close supervision of a faculty member. Subjects for research are chosen in an area of interest to both persons. Prerequisite: Psy 214 and P.O.I. (Offered by individual faculty-student arrangement)

**Psy 480-489 INDEPENDENT STUDY
IN PSYCHOLOGY Variable Credit**

This course offers the mature student the opportunity to independently pursue educational experiences not otherwise available in the curriculum. Prerequisite: P.O.I.

DEPARTMENT OF RELIGION AND PHILOSOPHY

BACHELOR OF ARTS

Using the heritage of Religion and Philosophy, the Department seeks to broaden the student's liberal arts curriculum by pursuing creative ventures which often cross over traditional disciplinary lines. Committed to the Judaeo-Christian tradition but the Department does not profess a single denominational consensus; we operate in the midst of a complex and pluralistic religious field. The Faculty encourage in the student a reflective stance which focuses on the basic philosophies, value systems and faith expressions of mankind, as a means of preparing one for graduate study, seminary, social work, counselling, and religious journalism.

B.A. with Major in Religion and Philosophy

A major shall complete 33 hours of course work in the department beyond the six hours required in the General Studies Program. As a minimum, the major must complete six hours of course work in each of the two divisions of religion and philosophy. All majors are required to complete at least 30 hours of upper division (300 and 400 level) courses within one's total degree program.

Students seeking a double major may petition the department to have six hours of the above course work requirement waived.

COURSE OFFERINGS

RELIGION

Rel 105 CONTEMPORARY ETHICAL ISSUES 3-0-3

An examination of current social issues in light of contemporary ethical discussion.

Rel 115 WORLD RELIGIONS 3-0-3

A study of the religious experience and its external forms as they are to be seen in the major religious traditions.

Rel 125 CONTEMPORARY RELIGIOUS ISSUES 3-0-3

A constantly changing survey of relevant problems and issues on the contemporary religious scene.

Rel 205 INTRODUCTION TO THE HISTORY, LITERATURE, AND FAITH OF ISRAEL 3-0-3

A study of the history of Israel as a basis for understanding the literature of the Old Testament and Biblical ways of faith; it also introduces the various tools of Biblical criticism.

Rel 215 INTRODUCTION TO THE HISTORY, LITERATURE, AND FAITH OF CHRISTIANITY 3-0-3

A survey of New Testament history, an orientation to the literature of the New Testament, and an appreciation of the conditions which gave rise to Christianity.

Rel 237 LITERATURE OF THE OLD TESTAMENT 3-0-3

A study of three major types of Old Testament books: prophecy, wisdom, and apocalyptic. Attention is given to the way in which these writings differ from each other. One book (such as *Isaiah*, *Jeremiah*, or *Job*,) will be studied in detail. Prerequisite: Rel 205

Rel 301-302 NEW TESTAMENT GREEK 3-0-3 each

A study of the fundamentals of koine Greek grammar to enable the student to read the New Testament in its original language. (Offered on demand in alternate years, 1976-77) *Note:* Advanced Greek is offered only as a Directed Study.

Rel 312 NEW TESTAMENT THEOLOGY 3-0-3

The nature and meaning of the early Christian proclamation as seen in the thought patterns and theological insights of the major contributors to the New Testament. Prerequisite: Rel 215

Rel 314 A HISTORY OF THE ANABAPTIST AND PIETISTIC MOVEMENTS 3-0-3

A study of the historical and theological backgrounds in church history as they relate to the Church of the Brethren and others within the context of "The Believer's Church."

Rel 317 HISTORY OF CHRISTIAN THOUGHT 3-0-3

A survey of representative thinkers in the history of the Christian Church and an examination of the central doctrines of the Christian faith. Prerequisite: Rel 125

Rel 321 CONTEMPORARY THEOLOGY 3-0-3

Designed to give the student a greater depth exposure to some aspect of theological thinking or study of a particular theologian or group of theologians. Prerequisite: Rel 125

Rel 333 ANCIENT SEMITIC CIVILIZATIONS 3-0-3

A comparative study of the major civilizations of the ancient world (excluding Greece and Rome). The focus is primarily upon the religion and literature of such cultures as the Sumerian, the Babylonian, and the Egyptian.

Rel 355 ADVANCED ETHICAL ISSUES 3-0-3

A concentrated study of a particular aspect of contemporary life with primary attention given to the style by which an ethical issue is identified and pursued. Prerequisite: Rel 105

Rel 370-379 SEMINAR IN RELIGION 3-0-3

An intensive study of a selected aspect of the Christian faith. (This course rotates among the department staff each semester.) Prerequisite: 12 semester hours in Religion and/or Philosophy.

Rel 480-489 INDEPENDENT STUDY variable credit**PHILOSOPHY****Ph 105 CONTEMPORARY PHILOSOPHICAL ISSUES 3-0-3**

An introduction to contemporary issues in philosophy

Ph 207 ANCIENT AND MEDIEVAL PHILOSOPHY 3-0-3

Readings in primary sources from the Pre-Socratics to Thomas Aquinas. (Offered in alternate years, 1975-76)

Ph 302 LOGIC 3-0-3

An introduction to the theory and practice of logic

Ph 304 CONTEMPORARY PHILOSOPHY 3-0-3

Readings in primary sources of the 19th and 20th centuries. (Offered in alternate years, 1976-77)

Ph 309 MODERN PHILOSOPHY 3-0-3

Readings in primary sources from Descartes to Kant.

Ph 352 PHILOSOPHICAL ETHICS 3-0-3

Readings in contemporary ethical analysis. (Offered on demand.)

Ph 357 AESTHETICS 3-0-3

An inquiry into the nature of the various art forms and their place in human experience. Attention is given to the problems attending the description, interpretation, and evaluation of aesthetic objects. Prerequisite: P.O.I.

Ph 368 PHILOSOPHY OF RELIGION 3-0-3

A study of man's rational efforts to establish the validity of the religious perspective with particular emphasis on theism. (Offered on demand.)

Ph 370-379 SEMINAR IN PHILOSOPHY 3-0-3

A specialized study within the field of philosophy. Prerequisite: P.O.I.

Ph 480-489 INDEPENDENT STUDY variable credit

DEPARTMENT OF SOCIOLOGY- ANTHROPOLOGY

BACHELOR OF ARTS BACHELOR OF SCIENCE

The department provides opportunity for the study of interpersonal and intergroup relationships, and the growth, changes, structures and processes of human societies. The goal of the department is to prepare the student for teaching, graduate study, and employment in research, social work and other fields where an understanding of the interrelationships of society is important.

B.S. or B.A. with major in Sociology

For the Bachelors degree, Sociology 101, 102, 201, 210, 211, 360 are required. Additional courses may be elected from any of the Sociology-Anthropology offerings in the department for a total of 30 hours. A course in probability and statistics is required, as is the passing of the competency test in Speech or the completion of a course in speech.

The Bachelor of Science degree differs from the Bachelor of Arts only in the College core requirements.

B.S. or B.A. with major in Sociology-Anthropology

A Bachelors degree with a combined major may be earned by taking 24 hours in sociology, including 101, 102, 201, 210, 211, 360 and 12 hours in anthropology. The BS differs from the BA only in the core requirements of the College.

B.S. or B.A. with major in Social Dynamics

The major requires 30 hours in the department of Sociology-Anthropology including Soc 101 and 102 plus six hours in Political Science, six in Economics and six in Psychology. Other courses can be chosen by the student in line with his personal objectives after careful consultation with his advisor.

Teaching certificate program in Social Science Comprehensive

The department of Sociology participates in the program for Comprehensive Social Science Certification. Students who choose to concentrate in Sociology-Anthropology plan individual programs to meet the standards of the State Department of Education. The concentration shall consist of 24 hours of sociology-anthropology courses and must include Soc 101, Soc 102 and Soc 204. Each student prepares an individual program in consultation with the Social Science advisor in the Department of Sociology and in the Department of Education. The proposed program must be approved by these representatives of both departments.

B.A. or B.S. with major in Social Work

A Bachelor's degree in Social Work requires the following courses: Soc 101, Psy 105, PS 118, EC 101, Com 105 (or passage of competency test), SW 222, SW 225, SW 226, SW 370 (or 50 hours of approved volunteer human service), SW 401, SW 402, SW 471-72, SW 498 plus 12 credits selected from Sociology-Anthropology, Psychology, Political Science, and/or Economics directed toward the student's professional goal and approved by the Social Work advisor.

The Bachelor of Science degree differs from the Bachelor of Arts only in the College Core requirements.

This major is based on accreditation requirements by the Council on Social Work Education and is subject to their approval which may necessitate changes.

COURSE OFFERINGS

SOCIOLOGY

Soc 101 INTRODUCTION TO SOCIOLOGY 3-0-3

Basic concepts and theories relating to the study of the social life of man with emphasis on fundamental sociological methods and approaches.

Soc 103 SOCIAL PROBLEMS 3-0-3

This course presents a sociological approach and interpretation of current social issues in modern society. Attention is given to topics such as poverty, alienation, crime and minority groups.

Soc 201 SOCIAL STATISTICS 3-0-3

A companion course to Math 151, Probability and Statistics, with working application to statistical procedures commonly used in sociological research and literature. To be taken concurrently with Math 151. (Fall)

Soc 202 PRINCIPLES OF SOCIOLOGY 3-0-3

Introduces students to the methods of social research and theory. It includes the history of the discipline, the meaning and use of key concepts, and varied approaches to the study of sociology. Prerequisite: Soc 101 (Fall)

Soc 204 SOCIOLOGY OF EDUCATION 3-0-3

The study of education as a social institution; the school as a social system; the school in the community; issues and pressures confronting education; the impact of social class differences; bureaucratic organization; and comparative educational systems. Prerequisite: Soc 101 (Alternate years; Spring, 1977)

Soc 210-211 SOCIOLOGICAL INQUIRY AND EXPLANATION 6-0-6

This course will provide students with basic skills for the social researcher. Content of the course includes research design, techniques of data collection, reduction and analysis, and explanation of information secured through all of these. (Spring)

Soc 212 POPULATION 3-0-3

A study of population, its size, growth, trends, composition; the relation of population units in their various aspects to economic, social, political, and other major forces, trends and institutions. Alternate years; Spring, 1977

Soc 215 CRIMINOLOGY 3-0-3

Sociological approaches to the study of crime, with an emphasis on current sociological theory and research. Special emphasis is given to the judicial system and penology. (Spring)

Soc 217 SOCIOLOGY OF RELIGION 3-0-3

An analysis of the role and function of religion and religious institutions in society, a study of religion as a social and cultural system. Prerequisite: Soc 101 Alternate years; Spring, 1977

Soc 220 MINORITY RELATIONS 3-0-3

Study of racial and other minorities in the United States, and their relationships with dominant groups. Includes study of discrimination prejudice, racial myths, and methods of reducing intergroup tensions. Prerequisite: Soc 101 Alternate years; Fall, 1975

Soc 222 SOCIAL WELFARE AS A SOCIAL INSTITUTION 3-0-3

See SW 222. Prerequisite: Soc 101

Soc 225 HUMAN DEVELOPMENT 2-1-3

See Psy 225 for a description of the course. The Soc Lab will focus on selected sociological concepts which are relevant to human development. Particular attention will be given to the socialization practices of an ethnic community.

Soc 305 MARRIAGE AND THE FAMILY 3-0-3

A brief comparative view of different family patterns; a functional approach to questions related to both premarital and postmarital aspects of married and family life in our American culture.

Soc 320 THE INDIVIDUAL IN SOCIETY 3-0-3

The study of social processes at the micro level of analysis. The nature and impact of social influence on the individual is considered. Areas of emphasis include: socialization, conformity, attitude formation and change, interpersonal and group processes. Prerequisite: Soc 101 Alternate years; Spring, 1977

Soc 340 GROUP DYNAMICS 3-0-3

The course attempts to integrate a theoretical and experiential approach to group processes. Relevant empirical research is considered. Various models of group intervention are utilized. Emphasis is placed on understanding and applying knowledge of group dynamics to everyday life. Prerequisite: Soc 101 (Fall)

Soc 360 DEPARTMENTAL SEMINAR 1-0-1

Selected sociological subjects will be examined. (Spring)
Graded H-P-Np.

Soc 371-380 SPECIAL TOPICS IN SOCIOLOGY 3-0-3

Readings and discussion of topical areas of sociology. Topics will be chosen in accord with the needs and interests of the participants.

Soc 471 INTERNSHIP P.O.I. Variable credit**Soc 481-490 INDEPENDENT STUDY IN SOCIOLOGY.
P.O.I. Variable credit****Soc 498-499 ADVANCED SEMINAR Variable credit**

Research in sociology under the close supervision of the instructor and in the context of peer discussion and criticism. A completed research experience is required. Prerequisites: Soc 210-211 and P.O.I.

ANTHROPOLOGY

The courses in anthropology offered by this department are designed to permit students of the College to acquire a fund of basic information about the principles of anthropology and an acquaintance with the diversity of world cultures.

An 101 PHYSICAL ANTHROPOLOGY 3-0-3

An introductory course in the study of man, his place in nature, his biological development, racial differentiation and archeological history prior to the dawn of European and Oriental history. (Fall)

An 102 CULTURAL ANTHROPOLOGY 3-0-3

An intensive introduction to cultural anthropology covering the nature of culture, methods and theories, and discussing characteristic features of the language, family life, rituals, and values of the world's peoples. (Spring)

An 307 PEOPLES AND CULTURES OF AFRICA 3-0-3

Ethnographic and cultural analysis of the folk background and contemporary customs of the peoples of Subsaharan Africa with special attention to the problems of culture change. Alternate years; Spring, 1977

**An 308 PEOPLES AND CULTURES OF LATIN
AMERICA 3-0-3**

Ethnographic and cultural analysis of the folk background and contemporary customs of the peoples of Latin America with special attention to the problems of culture change. Alternate years; Spring, 1976

An 311 WORLD CULTURES 3-0-3

A survey of some of the peoples and cultures of the world from early times to the present, with emphasis on physical, cultural, linguistic, and demographic factors. (Fall Semester)

**An 371-380 SPECIAL TOPICS IN ANTHROPOLOGY
3-0-3**

Readings and discussion of topical areas in Anthropology. Topics will be chosen in accord with the needs and interests of the participants. Topics may include: Mexican Life, Archaeology of Mesoamerica, Sociocultural Change, and Students are encouraged to suggest topics for study. P.O.I.

SOCIAL WORK**SW 222 SOCIAL WELFARE AS A SOCIAL
INSTITUTION 3-0-3**

An introduction to the social work major, this course explores the field of social welfare and the social work profession. Social welfare is studied from the historical, philosophic, and sociological perspectives. The profession of social work is viewed in the general human services context and specifically in various social service agencies. Prerequisite: Soc 101 (Fall)

SW 225 SOCIAL WELFARE SYSTEMS I 3-0-3

This study of social welfare systems focuses on national social welfare policies and the social service delivery system. Such social

problems as poverty, insecurity, and inequality of opportunity are examined in relation to national economic, political, and social systems. Prerequisite: SW 222 (Spring)

SW 226 SOCIAL WELFARE SYSTEMS II 3-0-3

This study of social welfare systems focuses on the community network of services to relieve community, family, and individual problems. The policies of various programs are examined in relation to social goals and values of the social work profession. Prerequisite: SW 222 (Summer Session at West Chester State College only)

SW 370 INTRODUCTORY FIELD EXPERIENCE 1-12-3

For the student who has not had volunteer human service work, this will be an opportunity to engage in "helping" activities during a summer session. The student will be able to begin focusing on social work practice and discover his own potentialities for the profession. (The student may be exempted from this with the approval of fifty hours of volunteer human service experience.) Prerequisite: SW 222

SW 401 METHODS OF SOCIAL WORK I 3-0-3

This course focuses on the social work model of the helping process, with particular emphasis on interviewing and problem-solving skills. Prerequisite: SW 222 (Fall).

SW 402 METHODS OF SOCIAL WORK II 3-0-3

This course focuses on the social work model of the helping process, with particular emphasis on problem-solving skills with groups and communities. Prerequisite: SW 222 (Summer Session at West Chester State College only)

SW 471-72 SOCIAL WORK FIELD EXPERIENCE 14 credits

An intensive educationally guided placement in a social service agency for actual social work experience. It requires two days of experience weekly for one academic year (beginning in the Fall) plus a one hour seminar meeting each week, or five days per week for one fourteen week semester (Fall, Spring, or Summer) with a weekly seminar. Taken on a H-P-NP basis. Prerequisite: P.O.I.

SW 498 SENIOR SEMINAR 3-0-3

This course will be geared toward integrating knowledge gained in social work, the courses in psycho-social foundations, and research methodology. A research proposal will be developed with emphasis directed toward social work practice in a specific field. Prerequisite: P.O.I.



GENERAL STUDIES

The program in General Studies exists to 1) assist students to achieve a level of competency in the basic skill areas (mathematics, reading, writing) necessary to successfully compete in college level courses and 2) to provide support services (tutoring, counseling, study skills) to students in regular courses. A few students who enter college each year exhibit one or more deficiencies in the basic skills and as a result need the services provided through the General Studies program.

The General Studies program has two basic components: 1) instructional and 2) support services. Instruction is provided in mathematics, reading, writing and study skills. Support services are provided through peer and professional tutoring, individual and group counseling.

A maximum of six credits may be earned in General Studies courses. These credits may apply toward graduation but do not apply toward core or major requirements.

The College actively seeks a limited number of students who ordinarily will not meet existing admission criteria but who show potential and who with skill development and support services may succeed in college. No student may elect to participate in the program for credit unless eligibility is established under currently existing selection criteria. Questions of eligibility should be referred to the Director of General Studies.

The following courses are provided through the General Studies program to eligible students.

GS 001 HUMAN POTENTIAL SEMINAR 2-0-1

The Human Potential Seminar is a small group experience that aims to provide a structure within which persons can generate and

share extensive positive information about themselves. The seminar activities of mutual and self-affirmation introduce participants to a greater awareness of, and respect for, their own and others' potentials. Specifically, seminar participants are able to list extensively and in detail their values, satisfying experiences, personal strengths, and future life goals.

GS 011 MATHEMATICS 3-0-2

A study of the fundamental arithmetic and algebraic skills prerequisite to college-level mathematics and science courses.

GS 021 WRITING 3-0-2

A study of the basic skills of writing—grammar, usage, mechanics—which are prerequisite to college-level writing and literature courses.

GE 031 READING AND STUDY SKILLS 0-2-1

Individualized instruction in reading improvement and study skills are provided in a laboratory setting. A wide selection of materials affords the student opportunity to achieve a solid base for expanding and adapting a thorough-going system of study to meet individual needs.

Registration for these courses is by permission of the Director of General Studies only.

INTERDISCIPLINARY MAJORS AND
AREAS OF CONCENTRATION

MEDICAL TECHNOLOGY MAJOR
(See Chemistry for detailed program)

Students preparing for this vocation need to complete a minimum of 100 semester hours in college and pursue a 12 month period of study in an approved hospital. For those students who desire a broader liberal arts background, the student has the option of spending a fourth year on campus and earning the B.S. prior to entering the clinical year.

FORESTRY AND ENVIRONMENTAL
MANAGEMENT MAJORS

Elizabethtown College offers a cooperative interdisciplinary program with Duke University. Following successful completion of three years at Elizabethtown and two years at Duke, the student is awarded a Master of Forestry or Master of Environmental Management from the School of Forestry and Environmental Studies, Duke University. The student also receives a B.S. degree from Elizabethtown upon successful completion of 128 credit hours.

A student has three program options: he may concentrate in the area of Biology, Business or Political Science. A total of 18–24 hours in the area of concentration and a combined total of 18 hours in the other two areas are required for each of the three options.

In order for the student to be accepted into the program at Duke, he must have completed the General Education Core for the B.S. degree and 36–42 semester hours in a combination of Biology, Business and Political Science. In addition, the student must have at least a 2.5 point average and the recommendation of the College.

For further details on the program, contact Mr. Laughlin or the Department Chairman in the area of the student's choice.

SOCIAL SCIENCE COMPREHENSIVE MAJOR

This program is more comprehensive than the usual departmental major in that while it permits students to complete a major

area in one of the social sciences it also develops a complementary background in two or three other areas of social sciences. The following are the areas in which one may specialize or do complementary work within the comprehensive program: history, political science, sociology, economics, and psychology. Please refer to the specific departmental requirements for the major and minor areas. Designed to operate on two tracks, the Social Science Comprehensive Major suits the needs of students with different goals, as follows:

I. For the prospective social science teacher.

This program is designed specifically for social studies teacher education and leads to a Bachelor of Science degree. The intent is to supply a prospective teacher in the social sciences with as complete a background as possible to teach in the public school system while still developing a major.

1. Structure of major includes 24 hours in the major,* 12 hours in each of three minors, and 6 hours of geography.
2. Structure of education component includes Ed 215, 305, 472, and the requirements of the General Education Core as specified by the College.

II. For those interested in an interdisciplinary approach.

This program is designed for those who, while not planning to teach, find the wider interdisciplinary approach to working within several social science areas appealing. It also leads to a Bachelor of Science. The requirements, which include a 24 hour major and two 15 hour minors, leave plenty of opportunity for electives. The student electing this major will be expected to become conversant enough with three social science disciplines to propose an interdisciplinary solution to an important social science problem. This capability will be demonstrated in his senior year when he fulfills a project (usually a major research paper) under the direction of a project director.

1. Structure of major includes 24 hours in the major, 15 hours in each of two minors, 3 hours each in the other two social sciences, 6 hours in statistics and/or computer science, the 3 hour senior seminar in social sciences, and the requirements of the General Education Core as specified by the College.

*If history is not the major area of concentration (24 hours), then it must be one of the 12 hour minor areas.

GENERAL SCIENCE CERTIFICATION

Elizabethtown College offers a secondary education certification program in general science. This program is designed to lead to a general science teaching certificate in secondary education with a major concentration in one of the areas of science. The program is established to develop a more comprehensive background for teachers in order that they may be more qualified to teach science in the general science curricula of junior high and middle school programs. Following are the areas in which one may specialize within the comprehensive program: biology, chemistry, earth science, and physics. Please refer to the specific

departments for the selection of courses necessary to complete requirements for the area of major concentration.

Following is the structure of the program: the major area of science concentration requires a minimum of 24 hours; three 8-hour minors (Bio 103, 104; Ch 101, 102; ES 111, 107 or 108; Phy 112, 211 for biology and earth science concentration or Phy 132, 231 for chemistry concentration); eight to 12 hours in mathematics (Ma 101, 121 or Ma 117, 118 for biology; Ma 101, 121 for earth science; Ma 101, 121, 122 for chemistry and physics); and GSC 371, History of Science.

The educational component requires: Psy 105, Ed 215, 305, 306, and 472.

PROFESSIONAL AND PRE-PROFESSIONAL CURRICULA

Business

The Department of Business offers programs in Business Administration and Accounting. See the description under Business Department for information.

Engineering

In cooperation with the Pennsylvania State University, Elizabethtown College offers a curriculum leading to an engineering degree. See the description under Physics Department.

Forestry

Elizabethtown College offers a cooperative five and one-half year program with Duke University which leads to a B.S. degree from Elizabethtown and an M.F. or M.S. degree in Forestry from Duke University. The student's program at Duke may be in Forest Management, Forest Protection or Natural Resource Ecology and Environmental Management. See interdisciplinary majors.

The Healing Arts

Pre-Dental, Pre-Medical, Pre-Osteopathy, Pre-Pharmacy, Pre-Veterinarian

Most individuals wishing to enter one of the healing arts will find it desirable to major in biology, chemistry, or psychology. Students not majoring in one of the sciences should plan a strong background of electives in science as a very important part of the pre-professional program. The program should be structured in consultation with the major department.

Pre-Nursing

The college offers two years of study which will enable the student to transfer directly to Widener's College of Nursing located at Chester, Penna.

This is a baccalaureate nursing program and has received full accreditation by the National League for Nursing.

We are not affiliated with nursing programs other than Widener. However, students may elect to transfer to other institutions with similar programs.

Persons interested in this program should consult with Dr. Robert Heckman of the Department of Biology.

Pre-legal

The College recommends that the student who plans to enter the legal profession should follow a course leading to one of several majors. Among these might be Business, Economics, History, Political Science, or Philosophy. This will make possible the election of courses in many areas.

Persons wishing to enter law school should become familiar with the admissions requirements of the schools in which study is projected and plan a course of undergraduate study accordingly. Information may be obtained from the pre-law adviser, Dr. Wayne A. Selcher.

Pre-Ministerial

Those who are preparing for the ministry should investigate the entrance requirements of the seminary in which they plan to secure their professional training. Majors in many different areas will prepare a student for admission to most theological schools. Such are the demands on the present-day clergyman that there are few subjects in the curriculum that would not contribute to his efficiency, and he should seek as broad a background as possible. Students interested in the professional ministry may wish to discuss that concern with the College Minister. Once the decision is made, the student should seek the aid of the departmental guidance adviser in the chosen major department.

Social Work

Elizabethtown College offers a complete program in social work designed to meet the requirements of the Council on Social Work Education. (Certification is presently pending.)

Completion of this major will allow a student to qualify for entry-level casework positions after graduation as well as prepare him for entrance into a graduate school of social work for professional training. For a more complete description of this major, see the Department of Sociology.

Health Care Management

For students interested in administrative work related to the health care institutions, students may select a concentration of courses in health care management listed in the catalogue with the offerings of the department of business.

Music Therapy

The College offers a program for students interested in the profession of music therapy. A music therapist works in various ways with children and adults who have physical or mental disorders. Specific information about the program is included with the course offerings of the music department.

Medical Secretarial Science

The College offers an Associate of Science degree in Medical Secretarial Science. Specific requirements for the program are listed with the course offerings of the department of business.

OFF CAMPUS STUDY

Cooperative Program of Undergraduate Study in Germany, France and Spain

The six colleges associated with the Church of the Brethren are cooperating in a junior year of study in Germany, France, and Spain. Students may study at Phillips-Universitat, Marburg/Lahn, West Germany, at the University of Strasbourg, France, and at the University of Barcelona, Spain. A wide selection of courses is offered in the social sciences and the humanities. Students are given intensive language instruction prior to the opening of the university semesters.

To qualify for this program, students must have completed the equivalent of the second year of German, French, or Spanish in college, and have approximately a B average. Other qualifications include seriousness of purpose, good character, demonstrated potential for social adjustment, and a basic understanding of the United States and the host country. A faculty adviser from one of the cooperating colleges is in residence in Europe during the year.

The program accommodates about twenty-five students at Marburg and about the same number at Strasbourg and Barcelona. Elizabethtown College has a quota of about three or four for each university. The interested student should confer with Dr. J. Kenneth Kreider, BCA Program Coordinator, and work closely with his major adviser.

UNIVERSITY OF GHANA AND UNIVERSITY OF THE AMERICAS

Elizabethtown College has programs of study abroad at the University of Ghana (Accra), West Africa, and the University of the Americas (Puebla, Mexico). English is the language of instruction at the University of Ghana, while the University of the Americas uses both Spanish and English. Further information on Ghana may be obtained from Dr. Bela Vassady and on Mexico from Professor Bruce Lehr.

Field Studies

Elizabethtown College has field study programs in education, accounting, political science, social work, and in a variety of departments. These programs involve the student directly in teaching in the public schools, and working in business, the state government in Harrisburg, various school agencies, etc. The learning experiences are structured, supervised, and evaluated by the College. See the departmental program for more information on the field study or internship in the student's area of interest.

Merrill-Palmer Institute

The Merrill-Palmer Institute of Human Development located in Detroit, Michigan, has approved Elizabethtown College as a cooperating institution in its undergraduate program in the behavioral sciences.

The Merrill-Palmer Institute, founded in 1920, is a non-degree granting institution of higher education. Its program includes teaching, research, and community services. The coeducational body is composed of both graduates and under-graduates from colleges and universities throughout the United States and abroad.

In addition to pursuing advanced theory courses, the Merrill-Palmer under-graduate aids in conducting research and has the opportunity to meet and work with some of the outstanding individuals in the field of behavioral sciences.

To be eligible, the student must be entering either the second semester of his junior year or the first semester of his senior year.

At the Institute, he will register for 15-17 semester hours, which will be accepted for credit when he returns to Elizabethtown the following semester.

Although the program is intended primarily for students in the behavioral sciences, other students having an interest will be considered. Further information may be obtained from the Chairman, Department of Psychology.

Center for Community Education

Elizabethtown College seriously considers educational service to the community as one of its primary roles in meeting the vast and varied needs of today's citizen. In accomplishing this role, Elizabethtown College has accepted the following goals for its continuing education program:

1. To provide degree and certificate programs for adults, who are unable to pursue the traditional study at the College, through the various divisions of the Center for Community Education. Degree and certificate programs are offered in the fields specifically programmed by an individual on the basis of a planned objective. This program may include traditional course work, in-house studies, standard examinations such as CLEP, CPEP, APE, REDP, and USAFI, specially prepared examinations, evaluation of internships and other achievements which may be weighted in terms of attainment towards a degree or a certificate of accomplishment.
2. To provide opportunities for adults to pursue studies for personal growth and professional improvement which may or may not lead to given levels or recognized academic goals. These opportunities allow adults to enhance their intellectual growth, aesthetic enjoyment, creative activity, and to increase their understanding of changing personal relationship thus making them wiser consumers, more effective workers, better family members and more responsible citizens.
3. To provide opportunities for individuals to continue their professional education and development beyond and apart from the academic degrees by providing continuing educational services to business, the church, labor, government and the professions, through various seminars, conferences, and institutes.

The above goals are implemented through the following segments of the Center for Community Education:

1. The Evening School and the University Center at Harrisburg through which the more traditional course work can be obtained to achieve the levels warranting the recognition of degrees and certificates of completion.
2. The Campus Free Division through which the individual goals of a person are evaluated, a satisfactory program prepared to meet these goals, and the options open are limited only by the initiative of the person in pursuing the program submitted and approved.
3. The Industrial Relations Institute plans specifically for the business and industry needs of the community. Seminars and workshops are planned and offered to meet the growing needs.

ACADEMIC INFORMATION

The College admits as regular students those who desire a Bachelor of Arts or Bachelor of Science degree program. A limited number of special students may also be enrolled.

The Student's Program

Each student must accept a major part of the responsibility to be familiar with the catalog materials and in consultation with his academic adviser he should carefully prepare his program.

The entering freshman is admitted into the College. The work of the first two years is selected to a large extent to ensure a foundation in general studies and enable the student to select a major wisely.

In most curricula a wide range of electives is offered in the junior and senior years. The student will take the prescribed courses outlined for each consecutive year. The College is not responsible to arrange the scheduling of courses out of sequence. To change from one curriculum to another, the student must consult with a member of the counseling staff.

Since the completion of 128 semester hours of work is required for a degree, a student's program must include an average of 16 semester hours for each of eight semesters to graduate in four years. Many students, however, wisely elect to take a lighter academic load in order to do better work. In these cases most students choose to attend a summer session or a part of a fifth year. A student with average grades may carry up to 18 semester hours of work in any given semester except summer session, when the maximum is 14 semester hours.

A student who has achieved a cumulative quality point-credit ratio of 3.00 or above may carry up to 20 semester hours credit in a semester or 16 semester hours credit in a summer session. For each semester hour above 18 for which a student is enrolled in a given semester, an additional fee is charged and the Dean of the Faculty must approve it.

Any student taking twelve hours or more of credit per semester at Elizabethtown College is considered a full-time student and will pay full tuition and fees. Any student taking 11 hours or less per semester will pay the regular semester hour rate, plus applicable fees. He will receive a library card entitling him to full use of the library facilities. In a summer session a full-time student is one carrying a minimum of eight semester hours divided into the two terms. Tuition and fees are paid according to the schedule in the summer sessions brochure.

The student's class standing is determined on the basis of the

number of credits he has earned. After earning 30 credits, he is considered a sophomore; with 60 credits he is a junior; with 90 credits he is a senior.

Registration

Students are required to register for classes on those days designated on the college calendar. Students registering later than the days specified will be charged a late registration fee of ten dollars. A student may register as either a "regular" or "special" student and as full-time or part-time in either category. Only a regular student is a degree candidate and must be in an approved program. A special student is not a degree candidate.

Change of Registration

Courses may be added within the first week of a semester and may be dropped without academic penalty during the first four weeks. Withdrawal from a class must be approved by the academic adviser and completed through the Registrar's Office.

Credits, Grades, and Quality Points

Credit is indicated in terms of the semester hour. Each semester hour unit signifies work completed in one 50-minute recitation or two or more 50-minute lab periods per week for a semester of 15 to 18 weeks or in an equivalent learning experience.

Grades are reported for work as follows: A, excellent; B, good; C, satisfactory; D, poor; F, failing; W, withdrawal, with the grades earned at the time of withdrawal from class; I, work incomplete. All grades of I, must be removed by April 1 for those received in the Fall semester; and by October 1 for those received in the Spring semester or Summer Session. Failure to do so results in a grade of F being recorded.

Quality points are given for credits as follows: for a grade of A, 4 per semester hour; B, 3 per semester hour; C, 2 per semester hour; D, 1 per semester hour; F, H, P, and NP, no quality points.

1. Credits earned at another institution while under the jurisdiction of Elizabethtown College, and as part of a program approved by Elizabethtown College, are

considered on-campus credits. The credits, grades, and quality points are calculated into the student's average.

2. The student's rank in class at graduation is based on the credits, grades, and quality points earned at Elizabethtown College.
3. Ordinarily a student may not repeat a course in which he has earned a grade of D. However, on the request of the student's adviser, and the approval of the department chairman, a student may repeat a course in his major department, or a course required by the major.

Academic Probation

Academic probation means that a student is in danger of being dismissed from the College for academic reasons.

If, after the student has completed between one and 18 semester hours in college, he has a cumulative quality point ratio below 1.50, or after completing 19 to 36 semester hours, below 1.80, or after completing 37 to 54 semester hours below 1.90, or after 55 to 72 semester hours below 1.95, or after completing 73 or more hours below 2.00, he is placed on *academic probation*. Academic probation is not retroactive to include the semester when probationary status was obtained.

It is recommended that a student who is on academic probation limit his load to four courses or 13 semester hours whichever is less in any semester in which the probation exists. The summer maximum should be two courses per term.

A student on academic probation encountering consistent or severe academic difficulty may be reclassified as a "special student" by the Committee on Academic Standing. In this instance a special student shall mean that he is not progressing satisfactorily toward the completion of his degree. As a nondegree candidate, a special student will not be able to participate in extracurricular activities or to represent the College in activities off campus effective the beginning of the semester in which he is placed on that status. These activities will include, but are not limited to, intercollegiate athletics, drama, forensics, groups representing the College off campus, student newspaper, radio station, etc.

A special student will lose his eligibility for financial assistance. The Office of the Registrar will automatically review the course work taken by the student and recommend his admission to regular standing at the College upon achieving a 2.0 cumulative quality point average. There is no guarantee that courses taken by the student during this period would be applicable to the degree upon achieving a 2.0 average. In this instance nondegree students will be limited to a load of four courses or thirteen semester hours, whichever is less.

Academic Dismissal

During the first two years of college, a student may be dismissed for academic reasons after two successive semesters of academic probation. During the last two years of college a student may be dismissed for academic reasons after one semester on academic probation.

A student on academic probation may be requested to withdraw from the college any time the Administration (upon recommendation from the Academic Standards Committee) so decides, after consideration of his overall situation.

A student who is either in academic difficulty or who is on academic probation may be requested by the Academic Standards Committee, in consultation with the student and advisors, to enroll in a special or particular program and/or to become involved in testing, counselling, or other developmental activities. Satisfactory performance by the student in such assignments may be interpreted by the Academic Standards Committee as "satisfactory progress" and may make it unnecessary for the Committee to discharge a student even though the above number of semesters on probation has accumulated.

Graduation Requirements

To be graduated from Elizabethtown College, the student must obtain 128 semester hours credit, or in the case of engineering, medical technology, and other special programs the number indicated in the course outline, and all of the specific courses indicated, together with the requirements for his major field.

Requirements will be governed by the catalog and the Program Guide Book issued by the Registrar dated four years prior to a student's graduation, or by the catalog in effect at the time of graduation, if the student so chooses.

Transfer students are subject to the requirements of the catalog in effect at the time they begin studies at Elizabethtown College. Students coming from two-year institutions may, if they desire, be governed by the catalog dated four years prior to graduation if they can present positive evidence that they planned to transfer to Elizabethtown College when they matriculated at the two-year college.

In order for the student to meet graduation requirements, he must earn a minimum of thirty semester hours credit in classes on the Elizabethtown College campus. These thirty credits must be from the last sixty credits, with a minimum of 15 of these credits in the major department.

Elizabethtown College will graduate only those students who

have met the moral and financial obligations incurred while they have been in pursuit of their college courses. The completion of the required number of semester hours does not in itself constitute eligibility for graduation.

The Office of the President must be notified by anyone who plans to be graduated in absentia.

It is the responsibility of the candidate for a degree in December, May, or August to make formal application for the degree in writing by September 15, February 15, and March 15 respectively to the Dean of the Faculty.

In order to be eligible for graduation, students must have a credit quality point ratio of at least 2.00 and a minimum average of 2.00 in the major. Students transferring from other colleges must have a ratio of at least 2.00 in courses pursued in residence at Elizabethtown College.

Dean's List and Graduation with Honors

A student having earned a quality point-credit ratio of 3.50 or above is regarded by the College as having performed with distinction.

Students earning a 3.50 or better quality point ratio in any given semester are placed on the Dean's List of Honor Students.

At the time of his graduation, a student who has achieved a cumulative quality point-credit ratio of 3.50 will be graduated cum laude; with a ratio of 3.75 his honor will be magna cum laude; with a ratio of 3.90, he will receive summa cum laude.

A transfer student will receive honors if he has earned a minimum 60 semester hours credit at Elizabethtown College, if he is recommended for honors by the major department, and if his average meets the requirements.

Scholar's Privilege

Any student who appeared on the Dean's Honor List during the preceding semester, may, with the permission of the instructor, attend any class in the College as a scholar's privilege without registration or credit.

Departmental Student Privilege

Any junior or senior student may, with the permission of the instructor, attend any class within his major department.

Credit by Examination

A regularly admitted student may request to be examined for credit over most catalog courses. Not included are practicum, internship, or research courses. The student must present an authorization form from the Registrar's Office (stamped by the Business Office) to the faculty member before the examination.

The faculty member may assist the student by giving a syllabus of the course and other recommendations. The examination will be comprehensive in nature and may take any form that the faculty member chooses. A fee is charged.

The result of the test should be reported immediately to the Registrar's Office.

Class Attendance

At the beginning of each course, the professor indicates his absence policies to the students in his classes. Excessive absence and tardiness are handled by the professor. A student may be dismissed from a course for excessive absences by the professor. The Academic Standards Committee may hear an appeal from the student with power to reinstate him in class.

The College attitude toward class absence is that the academically superior student should be allowed some flexibility in class attendance, and the academically inferior student should be under more rigid class attendance demands. It is the responsibility of each student to attend classes regularly and punctually. Absences caused by ill health and other personal problems should be cared for directly with the professor. Absences due to College sponsored activities are to be communicated by the educator in charge directly to the appropriate faculty and staff. However, it is the sole responsibility of the student to make the necessary arrangements with his professors at the beginning of the semester for class absences due to previously scheduled college sponsored activities. Difficulties necessitating appeal are dealt with by the Dean of the Faculty.

Unless previous arrangements are agreed to between a student and his professor, the student who is absent when an examination is given must secure permission from his instructor in order to take the examination. For a make-up examination which he is permitted to take, he will be charged \$2.00 per semester hour except in the case of final examinations for which he will be charged \$3.00 per semester hour.

Auditing Courses

A full-time student may elect to audit a course at no charge. He may not preempt a regularly enrolled student. The requirements for the audit will be determined by the professor in consultation with the student. A student may not change a course registration to audit after the end of the fourth week of the semester.

Full-time students enrolled in remedial courses for no credit are charged no fee.

Independent Study

The College recognizes the advantages of learning situations other than that of the traditional classroom. In addition to special off-campus programs such as internships, one may also elect independent study in certain instances.

Independent Study shall be undertaken for the purpose of special investigation of a topic or to academically benefit the advanced student in a special learning situation not attainable in regular catalog offerings. It should not be used simply to assemble credits for graduation. Application for an independent study involves making a preliminary definition of the topic or issue to be pursued. In the case of an interdisciplinary study, not only the permission of one's own professor but also of a professor in the second department is necessary. The faculty member or members sponsoring the Independent Study will be involved in planning and evaluating the project, but the student should be capable of independent work. Independent Study is not tied to the academic calendar and a project may be begun or ended at any point. It is to be registered with the Registrar at the beginning of the semester during which it shall be completed.

Application forms for Independent Study are available at the Registrar's Office.

Directed Study

Directed Study is a second type of study available to matriculated students at Elizabethtown College. In contrast to independent study of a special topic, a Directed Study will be for a regular catalog course which is not a part of the course offerings for the given semester. This method of study should be used by the student who needs rather frequent conferences with the professor.

Currently a full-time student shall be charged \$40 per credit hour for the study in addition to his regular tuition. Part-time

students, or students whose load exceeds 18 hours shall be charged the current part-time rate.

It is the responsibility of the student to locate the professor who has the background to teach the course and is willing to enter into the agreement. Registration for these studies is initiated in the Registrar's Office.

Tutorial Courses

Tutorials are available where remedial work is necessary, such that the student cannot profit from a classroom course or from one of the above methods of study. A tutorial involves more frequent meetings between professor and student than either Independent or Directed Study. Generally a faculty member will not teach more than one tutorial per semester.

Any student who enters into a tutorial agreement, currently shall be charged at the rate of \$90 per credit hour. This fee is charged over and above his regular tuition.

It is the responsibility of the student to locate the professor who is willing to enter into the tutorial agreement. Registration for these studies is initiated in the Registrar's Office.

SEVERANCE FROM COLLEGE

Non-Voluntary Severance

The College reserves the right to sever the relationship of a student with the College for academic reasons, social reasons, or a combination of the two, after the procedures of the College in such matters have been completed.

Voluntary Withdrawal

Withdrawal from the College is initiated through the Counseling Center. For purposes of billing, room reservation and academic responsibility, the effective date of withdrawal will be the date of return of the completed official notice to the Counseling Center. A student who withdraws without notification will receive no refund and may incur full room penalty. Failure to comply with withdrawal procedures may result in loss of: 1) the privilege of readmission to the College; 2) the right to clear transcript of credits.

Leave of Absence

A student may take a leave of absence from the College for academic, financial, medical, or personal reasons, or for fulfilling military/alternative service obligations. Leaves of absence for academic reasons require that a student be in good standing (2.00 average or better).

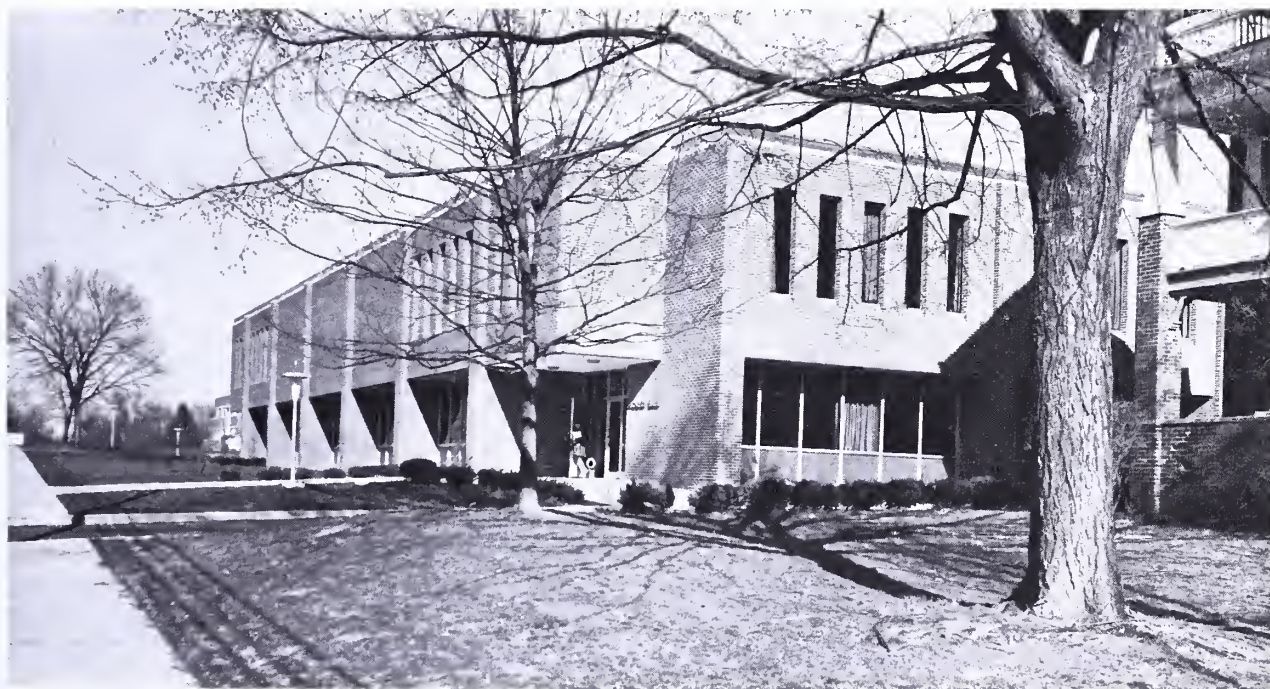
A leave of absence is initiated through the Counseling Center. A leave may be for one or two semester's duration except in the case of a leave for fulfilling military/alternative service obligations, where a leave may extend up to twenty-four months. A pre-registration deposit of \$100 is required as part of the leave of absence application. Application for a leave of absence from an academic program must be made no later than the pre-registration period in the semester prior to the one in which the leave begins. In the case of a leave of absence for illness, it is necessary that such illness be verified in writing to the College by a physician. A definite date of return to the College is necessary on all leave applications.

A leave carries with it the guarantee of a place in the student

body for the semester agreed upon at the time the leave is granted and for no other time. The student must reaffirm his intentions to return by pre-registering at the appropriate time. Failure to return on the date indicated on the leave application will result in forfeiture of the \$100 deposit and automatic withdrawal.

PRIZES

Outstanding achievement in a number of areas of study is recognized each year by awarding of prizes by individuals, organizations, and corporations. These prizes include the following: Royer Bible Prize, Weaver Biology Prize, Butterbaugh Chemistry Prize, J. W. Kettering Accounting Prize, Raffensperger Journalism Prize, Dr. John R. Gregg Memorial Award, Pennsylvania Institute of Certified Public Accounting Award, and the Wall Street Journal Award.





Finances

ANNUAL EXPENSES 1975-76

The expenses for the year are covered by a comprehensive fee, which for resident students includes tuition, furnished room, board (cafeteria closes after the noon meal on the day of closing of any school vacation, holiday, or semester break and reopens for the evening meal the day before classes start); use of library, student center, gymnasium, and athletic field, admission to all athletic games on the campus, admission to community cultural programs, subscription to the Etownian and Conestogan, and limited use of the Infirmary (resident students only.)

For commuting students the comprehensive fee covers the above except furnished room, board and limited use of the infirmary.

The comprehensive fee is as follows:

	Annual	Term
Resident Students:		
Founders Residence	\$3,790.00	\$1,895.00
Schlosser Residence	3,780.00	1,890.00
Brinser, Myer, Ober, Royer	3,730.00	1,865.00
Cooperative Housing	3,105.00	1,552.50
Off-Campus Residence	3,190.00	1,595.00
Commuting Students	2,590.00	1,295.00
Part-Time Student (under 12 credit hours per semester)		
Activity fee per semester:		
Resident		\$ 62.50
Non-Resident		15.00
Tuition per Credit Hour		65.00
Evening Sessions (under 12 credit hours per semester)		
Activity fee per semester (non-resident)		15.00
Tuition per Credit Hour		47.50
Tuition two courses totaling six credit hours		275.00
Fees in Addition to the Comprehensive Fee		
Private Music Lessons		75.00
(Twelve credit hours of individual instruction for full-time students taken as part of a formal degree program as a Music Major is included with the comprehensive fee)		

Credit Hours in excess of 18	65.00
Examinations for advanced standing per course	20.00
Make-Up Examinations	
Regular per credit hour	2.00
Final per credit hour	3.00
Accident and Sickness Insurance:	
Nine months	21.00
Annual	28.00
Breakage Deposit	25.00
Tutorial per Credit Hour	90.00
Directed Study per Credit Hour	40.00

ALL CHARGES ARE payable prior to registration each term. Credit allowed for College scholarships, grant-in-aid, matriculation or pre-registration deposits will be deducted from the invoice.

ALL FEES ARE SUBJECT TO CHANGE WITHOUT NOTICE AND ANY NEW OR SPECIAL PROGRAM FEES SHOULD BE AS QUOTED IN WRITING FROM THE BUSINESS MANAGER.

Absence and Sickness

A student who is absent from College because of sickness, or for any other reason, and retains his place in class, pays in full during his absence.

Withdrawal

Withdrawal from the College is initiated through the Counseling Center. For purposes of billing, room reservation and academic responsibility, the effective date of withdrawal will be the date of return of the completed official notice to the Counseling Center. A student who withdraws without notification will receive no refund and may incur full room penalty. Failure to comply with withdrawal procedures may result in loss of 1) the privilege of readmission to the College; 2) the right to clear transcript of credits. Refunds for a withdrawal due to serious illness or call by the Selective Service will be prorated to the date of withdrawal. No refunds are made when a student is suspended or dismissed from College.

If withdrawal occurs between July 1 and a date three weeks prior to fall registration, the resident student is liable for one-half of a semester's room charge. If the withdrawal occurs within the three weeks prior to the date of registration in either semester, the resident student is liable for a full semester's room charge, plus the applicable deposit. If the withdrawal occurs after the beginning of the semester, the student is obligated for a full semester's room charge, actual board used to the date of withdrawal, plus 25% of the unused portion and tuition as follows:

<i>Period of Attendance*</i>	<i>Per Cent of Semester's Charge</i>
First Week	25%
Second through Third weeks	50%
Beginning of the Fourth week	100%

General Expense Information

Two transcripts of credits will be provided free for all students while in regular attendance. A charge of one dollar per copy will be made for all other transcripts of credit. No transcripts of credit are furnished to students whose accounts are not paid in full.

A fee of \$15.00 must accompany the application for admission. This fee covers the cost of processing the prospective student's application, is non-refundable, and cannot be applied toward the payment of other charges.

A successful applicant should send to the Director of Admissions, Elizabethtown College, a matriculation deposit of \$100.00 within 30 days after receiving his letter of acceptance. This deposit reserves space in class and a room for boarding students. It will be credited to the student's account when he matriculates. The fee is not refundable, except that \$50.00 will be returned in event of withdrawal prior to February 15.

A pre-registration deposit amounting to \$100.00 is required of all matriculated students planning to return to college. The pre-registration deposit for the following year is payable at the time a student pre-registers for the fall semester. It is applicable to the first semester's account and is not refundable.

A graduation fee of \$10.00 is charged each candidate for a degree. Cap, gown, and hood rental is paid upon placing an order.

Checks should be made payable to Elizabethtown College.

Tuition and Fees for

Medical Technology Students

There will be an administrative charge of 10% of Elizabethtown College's tuition costs to the Medical Technology students entering their affiliation year in 1974, and thereafter. Beginning with freshmen Medical Technology students for 1974, whose affiliation will be in 1977, or later, are to be forewarned by the Admissions Office of the likelihood of being charged full tuition, less fees, because of the fact that hospitals are beginning to charge the College for intern services. Elizabethtown College will then meet the fees charged by the particular hospital in which the student has chosen to affiliate.

It is further understood that until the College charges full tuition to Medical Technology students for their intern year, said students will pay the hospital any charges directly related to the intern year, as well as pay the College the 10% administrative fee.

*The first day of registration counts as the beginning of College.

Trustees

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Management Consultant, Grove Manufacturing
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VERNON F. NICHOLS (1975)

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Chairman, Department of Surgery, Philadelphia
College of Osteopathy

M. ROBERT YOUNG (1976)
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GWENETH T. ZARFOSS, B.A., M.A. (1975)
Harrisburg, Pennsylvania

Assistant Director, Governor's Office for Human
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Civic Leader

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Lancaster, Pennsylvania

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York, Pennsylvania
Mechanical Engineer (retired)

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FLORENCE ARCURI CLARK at Pennhurst State School and Hospital

M.S., State University of New York College at Buffalo; O.T.R.

MARGARET L. CORSON at Harrisburg Hospital

M.D., Temple University School of Medicine

GLENDIA DOUGHERTY at St. Josephs Hospital

B.S., Virginia Commonwealth University; O.T.R.

JOHN W. EIMAN at Abington Memorial Hospital

M.D., University of Pennsylvania School of Medicine

ELDON ENVOLDSON at Reading Institute of Rehabilitation

B.S., Loma Linda University; O.T.R.

SHERRY GIBSON at York Medical Arts Building

B.S., Virginia Commonwealth University; O.T.R.

MICHAEL GOODLING at Harrisburg Polyclinic Hospital

B.S., University of Illinois; O.T.R.

BEN HARRIMAN at Harrisburg Polyclinic Hospital

M.D., Jefferson Medical College

NANCY LEWIS at Philadelphia Psychiatric Center

B.S., Virginia Commonwealth University; O.T.R.

DONALD MAUD at Lebanon Veterans Administration Hospital

B.S., Ohio State University; O.T.R.

WILLIAM V. MCDONNELL at West Jersey Hospital

M.D., Jefferson Medical College

MARION MILLER at Nassau County Hospital

B.S., University of Iowa; O.T.R.

MARGARET MOORE at The Delaware Curative Workshop

D/C, University of Pennsylvania; O.T.R.

BERNICE MOSS at Philadelphia Veterans Hospital

B.S., University of Pennsylvania; O.T.R.

SUSAN NORSENG at Threshold of Berks County, Inc.

M.S., University of Wisconsin; O.T.R.

WARD M. O'DONNELL at Lancaster General Hospital

M.D., Georgetown Medical School

GAIL RICHERT at Option-Day Treatment Center

B.S., University of Pennsylvania; O.T.R.

TERRY ROBINSON at Camp Hill State Correctional Institute

M.A., University of Wisconsin

ANNE SPENCER at Eastern Maine Medical Center

D/C, University of Pennsylvania; O.T.R.

BARBARA STRUBEL at the Child Development Center, Coatesville

M.S., University of Michigan; O.T.R.

MARY TEETER at Department of Public Welfare, Reading Hospital

B.S., University of New Hampshire; O.T.R.

ROSALIE TIENGCO at Bryn Mawr Hospital and Rehabilitation Center

B.S., University of the Philippines; O.T.R.

WILLIAM UMIKER at St. Joseph's Hospital

M.D., State University of New York at Buffalo

JOHN P. WHITELEY at York Hospital

M.D., Temple University School of Medicine

ADMINISTRATIVE STAFF AND
PARA-PROFESSIONALS

Craighead, Esta
Administrative Assistant in the Department of Education

Erb, Gerald M.
Equipment Supervisor, Athletic and Physical Education Department

Garner, Nevin O.
Programmer, Data Processing Center

Heim, Roger A., B.S.
Para-professional in Instructional Services

Hollinger, J. Robert, B.S.
Chief Accountant

Hughes, Diane S.
Computer Operator

*Kaltreider, Carol, R.N.
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Kroesen, Howard A., B.S.
Programmer, Data Processing Center

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Para-professional in the Department of Sociology and Political Science

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Replogle, Thelma S., B.A.
Library Assistant

Steelman, Sara E., Ed.M.
Advisor in the Registrar's Office

Wolgemuth, Nancy L., R.N.
Staff Nurse

*Part-time

OFFICE PERSONNEL

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Secretary to Dean of the Faculty

Boltz, Shirley
Payroll Clerk

Dalton, Josephine
Secretary to Director of Financial Aid

Decker, Debra
Secretary to Director of Alumni Affairs

*Eby, Jean
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Farrow, Kathy
Clerk, Admissions Office

Fultz, Helen
Secretary, Department of Safety

Gaw, H. Jeanette
Cashier, Business Office

Gehret, Melinda
Secretary, Allied Health Program

*Gibbons, Joyce
Secretary, Secretarial Services

- Good, Mary C.
Clerk, Bookstore
- Groff, Judith A.
Clerk, Post Office and Mail Room
- Hamilton, Dorothy
Clerk, Library
- Horne, Emma V.
Secretary to Director of Public Affairs
- Hossler, Helen
Purchasing Clerk
- *Howell, Ellen
Typist, Admissions Office
- Kautz, Donna R.
Keypuncher, Assistant Supervisor
- Kuntzelman, Julia F.
Clerk, Registrar's Office
- Little, Sandra
Secretary to Dean of Student Affairs
- *Martin, Cathy
Clerk, Duplicating Services
- McBeth, Doris
Secretary to Director of Development
- McSparren, Margaret B.
Secretary to Director of Admissions
- Miller, Charleen
Clerk, Registrar's Office
- Miller, Cindy L.
Clerk, Secretarial Services
- Miller, Karen
Secretary to Director of the Center for Community Education
- Mumaw, Ruth
Secretary to Director of the Library
- Myers, Helen B.
Secretary to Treasurer
- Myers, Margaret
Clerk, Duplicating Services
- Nelson, Cynthia
Secretary, Secretarial Services
- Parmer, Nancy
Secretary to Business Manager
- Raber, Sarah Jane
Secretary to Director of Athletics
- *Rathsam, Patricia F.
Clerk, Department of Safety
- Reed, Dorothy
Secretary to Director of Career Planning and Placement
- *Rhen, Grace
Clerk, Library
- *Rice, Gloria
Secretary, Secretarial Services
- Shaneor, Sara A.
Records Clerk, Public Affairs
- Shank, Alice F.
Posting Clerk
- Sikorski, Stella
Student Affairs Secretary with major duties in the areas of Student Activities and Residence Halls
- *Singer, Gladys
Secretary to Director of Religious Life and Church Relations
- Snively, Freeda
Switchboard Operator/Receptionist
- Snyder, Kathy E.
Development Office Secretary
- Snyder, Yolanda
Secretary/Clerk, Instructional Services
- *Steinhart, Norma
Secretary, Industrial Relations Institute
- *Sweeney, Mary C.
Clerk, Secretarial Services
- Sweigart, Evelyn L.
Secretary to Office Manager and Associate Director of Personnel
- Waser, Janet
Keypunch Supervisor—keypuncher
- White, Linda
Secretary to Registrar
- *Wolverton, Geraldine
Secretary, Secretarial Services
- Zellers, Susan
Bookkeeper/Clerk

*Part-time

CAMPUS DIRECTORY

Persons seeking information about Elizabethtown College or particular programs of the College are invited to direct correspondence or telephone calls as indicated below.

All correspondence should be addressed to Elizabethtown College, Elizabethtown Pennsylvania 17022.

To telephone, call 717-367-1151. Ask the switchboard operator to dial the office you indicate.

Academic Matters	Dean of the Faculty Alpha Hall
Admission of Students	Director of Admissions Alpha Hall
Alumni Activities	Director of Alumni Relations Alpha Hall
Business Matters	Treasurer Alpha Hall
Center for Community Education	Director of CCE Alpha Hall
Conference Facilities	Director of Conferences
Evening Studies	Registrar Alpha Hall
Financial Assistance for Students	Director of Financial Aid Alpha Hall
General Information	Director of Public Affairs Alpha Hall
Gifts or Bequests	Director of Development Baughers Student Center
Housing of Students	Director of Housing Baughers Student Center
Intercollegiate Athletics	Director of Athletics Alumni Physical Education Building
Placement Services	Director of Placement and Career Guidance
Summer Session	Registrar Alpha Hall

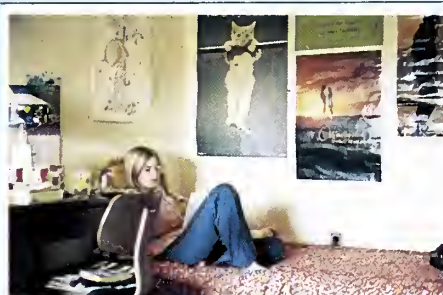
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Elizabethtown College Bulletin



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ELIZABETHTOWN COLLEGE BULLETIN

Catalog Edition

ELIZABETHTOWN COLLEGE
ELIZABETHTOWN, PENNSYLVANIA

Elizabethtown College is accredited by the Middle States Association of Colleges and Secondary Schools, the only accrediting association for colleges in this area of the United States.

Students are to be governed by the policies and provisions contained in this Bulletin, subject to the right of the trustees, administration, and faculty to repeal, change, or amend them at any time.

Vol. LXIII

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Elizabethtown College is in compliance with the requirements of Title VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and all other applicable federal, state and local statutes, ordinances, and regulations. Elizabethtown does not engage in illegal discrimination against students, prospective students, employees, or prospective employees on the basis of race, color, religion, ethnic or national origin, age or sex.

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1977-79

CALENDAR

1977-78

FALL SEMESTER

August 29–Sept. 2	Faculty Meetings & Orientation
September 1	Freshmen Arrive
September 4	Upperclassmen Arrive
September 5	Registration
September 6	Classes begin 8 a.m.
October 14	President's Convocation
October 21–23	Fall Recess
October 24	Classes Resume 8 a.m.—Midterm
November 23	Thanksgiving recess begins 10 p.m.
November 28	Classes resume 8 a.m.
December 15	Classes of Friday, December 16, will be held
December 15	Classes end 10 p.m.
December 16	Reading Day
December 17–22	Final Exams

SPRING SEMESTER

January 9–13	Faculty Meetings & In-service Programs
January 16	Registration
January 17	Classes begin 8 a.m.
March 3	Midterm
March 17	Spring vacation begins 5 p.m.
March 28	Classes resume 8 a.m.
May 2	Classes of Wednesday, May 3, will be held
May 2	Classes end 10 p.m.
May 3	Reading Day
May 4–10	Final Exams
May 13	Commencement

SUMMER SESSIONS

May 15–June 2	Term I
June 12–July 14	Term II
July 17–August 18	Term III

CALENDAR

1978-79

FALL SEMESTER

August 28–September 1.....	Faculty Meetings & Orientation
August 31.....	Freshmen Arrive
September 3.....	Upperclassmen Arrive
September 4.....	Registration
September 5.....	Classes begin 8 a.m.
October 20–22.....	Fall Recess
October 23.....	Classes Resume 8 a.m.
October 23.....	Midterm
October 27.....	President's Convocation
November 22.....	Thanksgiving recess begins 10 p.m.
November 27.....	Classes resume 8 a.m.
December 14.....	Classes of Friday, December 15, will be held
December 14.....	Classes end 10 p.m.
December 15.....	Reading Day
December 16–21.....	Final Exams

SPRING SEMESTER

January 8–12.....	Faculty Meetings & In-service Programs
January 15.....	Registration
January 16.....	Classes begin 8 a.m.
March 2.....	Midterm
March 2.....	Spring Vacation begins 5 p.m.
March 12.....	Classes resume 8 a.m.
April 12.....	Easter recess begins 5 p.m.
April 17.....	Classes resume 8 a.m.
May 1.....	Classes of Wednesday, May 2, will be held
May 2.....	Classes of Friday, May 4, will be held
May 2.....	Classes end 10 p.m.
May 3.....	Reading Day
May 4–9.....	Final Exams
May 12.....	Commencement

SUMMER SESSIONS

May 14–June 1	Term I
June 11–July 13	Term II
July 16–August 17	Term III



Our Purpose As A College

The purpose of Elizabethtown College is personal.

To be personal is to become ever freer of one's limitations. Elizabethtown College seeks to aid the student in further developing competent and constructive habits of thought, a desire and capacity to know, clear and coherent means of self-expression, and a growing understanding of himself and the world around him—natural, social and cultural.

To be personal is to have a sense of values. The College accepts and promotes among the members of its academic community the values, attitudes, and motives which are historically associated with the Christian faith. It recognizes each person as a moral being for whom life has meaning and destiny. It believes that without a sense of moral responsibility, the educated person can serve inhuman and degrading purposes as easily as he can serve human and redemptive purposes.

To be personal is to have a sense of social responsibility. Elizabethtown College expects each member of the academic community to face the basic issues of his personhood, to be involved in a creative and orderly relationship with others in the academic community, and to pursue excellence in a climate of responsible freedom. The College, in keeping with its historic motto, advocates the ideal of service to society in personal and professional pursuits.



The College— An Overview

An Introduction—Elizabethtown College is a private, coeducational, church-related institution offering a variety of major field studies leading to the Bachelor of Arts or Bachelor of Science degree.

The curriculum includes a number of career-oriented programs in business, education, health care, and social work. In addition, majors are offered in the traditional arts and sciences.

The fulltime student enrollment is fairly equally divided between men and women, most of whom (about 80 per cent) are resident students.

Beyond its program of traditional education, the College offers a broad range of studies through its Center for Community Education.

History—The College was founded in 1899 by members of the Church of the Brethren. It was established, according to the Charter, “to give such harmonious development to the physical, mental, and spiritual powers of both sexes as will best fit them for the duties of life and promote their spiritual interests.”

Elizabethtown College is related to the Church of the Brethren, which has its roots in the free-church movement of the early 18th century in Germany. The denomination is non-credal, congregationally centered and fosters belief in individual conscience, the brotherhood of humankind, and non-violence.

Formal accreditation was granted in 1921 by the Commonwealth of Pennsylvania and in 1948 by the Middle States Association of Colleges and Secondary Schools.

The College began to grow rapidly after World War II. Enrollment has more than quadrupled since 1946. An aggressive building program led to the expansion of campus facilities to support a growing and diversified academic program.

Elizabethtown College holds membership in the Association of American Colleges and the Middle States Association of Colleges and Secondary Schools and is approved by the American Association of University Women, the New York Board of Regents, the American Chemical Society, the National Association of Schools of Music, the National Association for Music Therapy, and the American Medical Association (for programs in occupational therapy and medical technology).

Location—The College is situated in Elizabethtown, a residential community of approximately 8,000, in Lancaster County, Pennsylvania. The surrounding area features a blending of productive agriculture and industry. Folklore and history abound in the region, which is the home of the famed Pennsylvania Dutch.

Life on the Campus

Elizabethtown College believes that a student's years on campus should be remembered as a total, unified experience complete with a sense of personal achievement and development.

For this reason the basic philosophy of life on the Elizabethtown College campus seeks to bring about cohesion among academic endeavors and activities outside the classroom.

Life in the residence hall, the dining room, the student center, and the gymnasium is not set apart from the student's work in the classroom, laboratory,

or library. All aspects of campus life are interrelated and are viewed as integral parts of the educational process.

By blending his own personality with this educational setting, the student is expected to develop a sense of social responsibility, a concern for the welfare of others, and a deep sense of personal integrity.

The College is as concerned for the cultivation of character and wisdom as it is for the mastery of certain facts and skills.

To round out campus life, Elizabethtown offers a wide variety of student activities and services, including campus government, clubs, recreation and athletics, student health services, counseling services, student publications and communications, religious activities, and others.

Elizabethtown College supports the statutes of the Commonwealth of Pennsylvania controlling the possession and use of alcoholic beverages; it also supports the local, state and federal laws which make the possession, distribution and use of certain drugs illegal. Moreover, it is contrary to the policy of Elizabethtown College for students to purchase, possess (store), and/or consume alcoholic beverages and/or illegal drugs while under College jurisdiction. College jurisdiction includes any social, athletic, or educational activities on- or off-campus sponsored by or related to the College.

Student Records

Elizabethtown College enthusiastically complies with the provisions set forth in both the Family Educational Rights and Privacy Act of 1974 and in House Joint Resolution 40. The guidelines set forth and followed by Elizabethtown College are explicitly stated in the Student Handbook under the heading of STUDENT RECORDS.

The Campus

Students at Elizabethtown College live and learn on a 110-acre campus distinguished by the quiet, natural beauty of its buildings, a broad tree-lined dell, a lake, and a terraced complex of athletic fields.

Major buildings feature a modern colonial style of architecture with brick construction. All are new or totally renovated since 1957.

Principal buildings on the campus:

Academic and Administrative Facilities

Alpha Hall—the administrative center, housing the offices of the President, Dean of the Faculty, Treasurer, Director of Public Affairs, Director of Admissions, Registrar, Business Manager, and Director of Financial Aid.

Nicarry Hall—dedicated in 1973, a modern academic building containing classrooms, offices, the College's computer operation, and specialized facilities for the Departments of Business, Education, Political Science, and Sociology.

Esbensshade Hall—a general purpose classroom building with laboratories for physics, biology, psychology, and occupational therapy.

Rider Hall—houses the Department of Music with offices, practice rooms, and a recital hall.

Zug Memorial Library—features open stack areas for research, large reading rooms, small study rooms, and a music audition room. Library holdings include 134,000 volumes and numerous periodicals, records, and microfilm materials.

Wenger Center—contains the Center for the Humanities with offices and seminar rooms for the Departments of English, History and Religion/Philosophy, and Modern Languages.

Gibble Science Hall—houses laboratories for chemistry and general classrooms.

Campus Residences

All campus residences feature double occupancy rooms, attractive lobby areas, laundry facilities, and areas for study and recreation.

Founders Residence—completed in 1971, houses 328 men and women in four separate living areas (Beahm, Falkenstein, Hertzler, Zeigler Houses). Small group living suites are featured.

Schlosser Residence—houses 206 women, features small group suites with carpeting and air conditioning throughout, built in 1965.

Elizabeth Myer Residence—completed in 1957, houses 130 women and contains campus dining room.

B. Mary Royer Residence—dedicated in 1962, houses 133 women.

H. K. Ober Residence—houses 247 men in two wings, built in 1960.

D. E. and Sadie M. Brinser Residence—houses 144 men, dedicated in 1965.

Auxiliary Facilities

Alumni Physical Education Building—dedicated in 1970, features the Troy and Elsie Thompson Gymnasium with seating for 3,000, two classrooms, offices, and special facilities for physical education.

Baughner Student Center—includes student lounges, snack bar, post office, game room, swimming pool, bowling alleys, the Counseling Center, and student communications center with radio station and newspaper and yearbook offices.



Entering the College

Interested students are urged to take a close look at Elizabethtown's varied academic offerings, its educational philosophy, and its physical facilities. Visits to campus are encouraged and may be arranged through the Office of Admissions.

Elizabethtown College seeks serious students who intend to apply themselves to the educational process. Students are admitted without reference to race, color, creed, sex, or national origin.

The College reserves the right to admit students on a selective basis in order to maintain departments and majors of an effective size.

Students may be admitted under four different plans.

REGULAR ADMISSIONS PLAN

Young men and women who are high school graduates will be welcomed for admission to Elizabethtown College. Their records should indicate good character, serious scholarship, and satisfactory health in order that they might do acceptable college work.

Guiding principles used as applications are evaluated suggest:

1. That the student be a graduate of a senior high school accredited by the regional accrediting agency or by the Department of Education of the state in which he lives.
2. That he be recommended by his high school principal and/or guidance counselor both in regard to academic ability and character qualifications.
3. That he complete a College Preparatory

course. If a student has not completed such a course but is deemed, through test scores or other means of evaluating his potential, qualified for entrance, he may be admitted.

4. That he take the American College Test or the Scholastic Aptitude Test.
5. That he appear for an on-campus interview.
6. That he provide a physician's statement on a form provided by the College.

Advanced Placement Program (CEEB)

Elizabethtown College participates in the Advanced Placement Program of the College Entrance Examination Board. With the approval of the department concerned and the Dean of the Faculty, advanced placement and credit are granted to students who perform satisfactorily in college-level courses and on the Advanced Placement Examination.

EARLY ADMISSIONS PLAN

In a sincere effort to provide an opportunity for academic acceleration by superior students, Elizabethtown College has initiated a program under which carefully selected students may begin their higher education immediately after completing the junior year in high school.

Students enrolled under this program become full-fledged freshmen at the College and, upon successful completion of the freshman year, are granted a high school diploma in addition to the college credits earned. This program has the full cooperation and support of the Pennsylvania Department of Education.

All degree programs at the College are available to these selected students, who are expected to exhibit the mental and emotional maturity necessary

to adjust to the general program of the College. Following enrollment, students receive close academic guidance by selected faculty members.

All applicants for the accelerated admission program are carefully screened on a highly individualized basis. Particular attention is given to the following personality factors: mental ability, scholastic achievement, social and physical maturity, and personal motivation.

To be accepted, students must have completed the eleventh year in an accredited high school program and rank in the upper percentiles of their high school class.

Test results are given weighty consideration.

The opinions and predictions of the student's high school principal and guidance counselor are of prime importance, as are those of the College's department head in the particular discipline elected by the applicant.

The written approval of the student's parents, high school principal, and guidance counselor is mandatory before the student can be accepted.

In addition to the indicated statistical data, the selection process includes a conference with the student by the Director of Admissions in the presence of parents, principal and guidance counselor.

Any student interested in applying for this accelerated program should first discuss the matter thoroughly with the high school guidance counselor and then write to the Director of Admissions at Elizabethtown College for an application form.

TRANSFER ADMISSIONS PLAN

Elizabethtown College welcomes students who have been enrolled in other colleges and who find enrolling at Elizabethtown to be of value to their educational objectives. Students who, at the time of

matriculation, are graduates of a degree granting, two-year college accredited by one of the six regional accrediting agencies will receive full Junior standing and will be required to earn a minimum of 64 semester hours for graduation by the College.

Students who do not have a degree may transfer a maximum of 64 hours of credit from an accredited two-year college.

College credits not transferred as a part of a degree program and obtained with a grade of C or P or better from other accredited institutions and acceptable toward a degree at Elizabethtown College, may be transferred upon the approval of the Registrar. In any doubtful situations, the Registrar will consult with the Department Chairman and/or the Dean. Grades are not transferable. Courses, however, may be transferred.

In addition to the six principles listed under the Regular Admission Plan, the student will need to present an official transcript indicating work completed at, and honorable dismissal from any and all colleges attended. The College will request recommendations from the personnel deans of the college last attended. Students from non-accredited institutions should see the special admissions plan listed below.

SPECIAL ADMISSIONS PLAN

1. Transfer students from non-accredited colleges:

Students may wish to enroll at Elizabethtown who have attended a non-accredited institution. In those cases in which the record is above average, the College may allow a student to validate this non-accredited work by passing more advanced courses at Elizabethtown. In such

cases, Elizabethtown reserves the right to revise the evaluation after the equivalent of one semester work at Elizabethtown College. Such students may also validate credit by passing the College Level Examination Program Tests upon the approval of the department concerned and the Dean of the Faculty.

2. Continuing Education for mature adults:
Many adults have continued a broad reading program as well as having had other valid learning experiences. Credit for that which they have learned in these less formal ways is available through testing. Elizabethtown College accepts up to two years of college credit from the College Level Examination Program Tests.

In some instances, mature adults are able to benefit from a college experience but lack the formal education to enter college under one of the three plans listed above. In those cases in which successful work or other experience indicates such strength, a student may be admitted as a special student on a trial basis.

In all special admissions cases, as many of the principles listed under the Regular Admission plan as possible will be followed. Full admission may be granted after completion of 15 hours of work with grades "C" or better.

FINANCIAL AID FOR STUDENTS

In general, student aid packages include three types of aid: Non-repayable grants or scholarships, low-interest educational loans, and part-time employment. These aids come from state and federal

government programs, industry and other agencies in the private sector such as churches, fraternal and service clubs, and from college-based aid programs. Students and parents should explore all possible sources of aid. The College Financial Aid Office and local high school counselors are sources of information about various programs.

GRANTS AND SCHOLARSHIPS

Students seeking aid from Elizabethtown College are expected to apply for the Basic Educational Opportunity Grant Program of the federal government and for their state grant program if one exists in their state. Residents of Pennsylvania will apply to the Pennsylvania Higher Education Assistance Agency in Harrisburg for the Pennsylvania Grant Program. Most Pennsylvania high school seniors receive applications by mail from the PHEAA Program.

Elizabethtown College offers Academic Scholarships to a limited number of students each year. Minimum requirements include ranking in the top ten percent of one's high school graduating class and achieving a combination score of 1000 in the SAT or 22 in the ACT College Admissions Testing Program. Scholarships are renewed upon maintenance of a stated grade point average.

Grants are available on a competitive basis for students showing special leadership or talent and demonstrating financial need. Special programs are available for Minority-Group students and athletes.

Students with exceptional financial need may apply to the College for aid under the Supplemental Educational Opportunity Grant Program, one of the institutional-based federal programs.

Students who have a brother or sister as a full-



time student at Elizabethtown College will receive a \$250 Sibling Grant each year.

The College has the following restricted grants and scholarships:

RUTH ESHLEMAN ALTHOUSE SCHOLARSHIP—given annually to a student who has completed at least two years in a curriculum leading toward teaching on the elementary or secondary level, recognizes scholarship, interest and creativity in preparation for a teaching career. The late Mrs. Althouse was a 1936 graduate of Elizabethtown College.

THE FLAVIA MARTZ BAUGHER MEMORIAL TEACHING FUND—was established by Raymond R. Baugher, class of 1928, and James F. Baugher, class of 1957, in honor of the success and interest which Flavia Martz Baugher, class of 1928, had as a teacher. Income from this fund is awarded annually in two equal amounts to the two senior students—one in Elementary Education and one in Secondary Educa-

tion—who manifest in outstanding fashion the high examples set by Flavia Martz Baugher during her long tenure as a teacher. Selection of these two students is based upon overall promise as a teacher, adequate knowledge of the subject matter in the area of teaching preparation, and strong interest in teacher education.

BETHANY BRETHREN HOSPITAL HEALING ARTS SCHOLARSHIP—provides \$500 each year to an Elizabethtown student preparing for a career in one of the healing arts. Preference is given to qualified members of the Church of the Brethren.

THE BLACK SCHOLARSHIP FUND—established by faculty and administrators of the College, provides a full tuition scholarship for a black student.

THE GRACE C. BLOUGH MUSIC SCHOLARSHIP FUND—provides \$1220 annually to one or more students majoring in Music at Elizabethtown

College. Selection is based on musical aptitude, level of performing competency, academic ability and achievement, financial need and character.

E. DOROTHY DANN BULLOCK MUSIC THERAPY TALENT GRANT—is given each year to a student majoring in Music Therapy to help defray tuition costs.

THE THOMAS C. CONOVER MEMORIAL SCHOLARSHIP—was established in perpetuity in memory of Thomas C. Conover, class of 1970. The scholarship is in the amount of \$300 annually and is awarded to qualified full-time upperclass Biology Majors to help defray tuition charges. The criteria for selection includes academic achievement, scientific attitude, and personal character.

THE ROBERT S. DOHERTY SCHOLARSHIP—is presented annually to a full-time Eliza-

bethtown College student who demonstrates academic achievement and athletic ability with potential in track or cross-country. The scholarship was established in perpetuity in memory of Robert S. Doherty, class of 1972. Criteria for selection includes demonstrated scholastic ability, athletic potential in track or cross country, financial need, and good character. The award is in the amount of \$500 annually to be used to defray tuition charges.

THE ELIZABETHTOWN KIWANIS CLUB SCHOLARSHIP—is given annually to one or more students from the Elizabethtown Area School District and may provide up to one-half of full tuition cost.

THE HERMAN G. ENTERLINE SCHOLARSHIP—is given each year to a student in Business Education in memory of the late Dr. Enterline, a 1931 Elizabethtown graduate.



ELMER L. AND FRANCES E. ESBENSHADE SCHOLARSHIP AID FUND—provides grants to Lancaster County students from the income of a trust fund established by Mr. Esbenshade.

THE FUND FOR THE ADVANCEMENT OF ETHNIC UNDERSTANDING—established by the Cyrus G. and K. Ezra Bucher families provides financial assistance to students, faculty, and churchmen involved in promoting greater harmony among ethnic groups through seminars, in-service practicums, research and symposiums dealing with ethnic problems.

THE GREYHOUND CORPORATION—has provided a \$1000 scholarship each year recently to an Elizabethtown freshman. Armour-Dial, Inc., a Greyhound subsidiary, has renewed the grant for the student's second year. These are designed to serve members of minority groups.

THE EDGAR LEER FUND—was established to aid students preparing for the ministry.

THE NATIONAL CENTRAL BANK WORK-SCHOLARSHIP PROGRAM—provides up to \$1000 per year for a student from the bank's Harrisburg area and couples this with summer and school-time employment in the bank's various departments. The program provides one new scholarship each year to a student in a business-related major.

NATIONAL MERIT SCHOLARSHIP—Elizabethtown College sponsors two scholarships each year to entering freshmen through the National Merit Corporation's scholarship program. This four-year scholarship provides a maximum of \$1500 per year depending upon the financial need of the student.

THE PENNSYLVANIA BIG 33 SCHOLARSHIP—was established in 1975, and will provide \$1000 to a student from South Central Pennsylvania.

PENNSYLVANIA DUTCH DAYS SCHOLARSHIP—The Pennsylvania Dutch Days Committee, Hershey, has established a scholarship fund for underwriting a research project on Pennsylvania Dutch language or culture, or for providing financial aid to a student in need.

THE RESSLER MILL FOUNDATION SCHOLARSHIP FUND—was established by Anna C. and W. Franklin Ressler in honor of their parents, Jacob K. and Annie Martha Groff Ressler, and their grandparents, William and Mary Martin Ressler. The scholarship provides annual financial assistance to students majoring in Occupational Therapy at Elizabethtown College. Criteria for selection of student recipients include academic achievement, scientific aptitude, and character.

R. KENT REPLOGLE SCHOLARSHIP—was established in 1975, to provide \$1000 to a senior who has won at least two varsity letters in inter-collegiate athletics.

MARY SACHS SCHOLARSHIP FUND—The Mary Sachs Scholarship Fund has been established to honor the memory of Mary Sachs, merchant, humanitarian, and civic leader. The income from the Fund is granted each year to one or more outstanding students having financial need, preferably preparing for a career in the field of business.

THE JOHN P. SHEPHERD, JR. ATHLETIC SCHOLARSHIP—was established in perpetuity by a bequest from Edith S. Taylor in honor of her

nephew, John P. Shepherd, Jr., class of 1969. The scholarship is in the amount of \$125 annually and is awarded to a qualified full-time upperclass student athlete to help defray tuition charges. The criteria for selection is based on academic achievement, athletic performance, and personal character.

THE SPERRY NEW HOLLAND SCHOLARSHIP—will provide three \$1000 scholarships annually to be given to one business student in each of the sophomore, junior, and senior classes.

THE VICTOR F. WEAVER SCHOLARSHIP FUND—established by Victor F. Weaver, Inc., provides financial assistance to incoming freshmen students with preference given to children of Weaver employees.

LOANS

Students with financial need may borrow up to a maximum of \$1000 per year under the National Direct Student Loan Program. Such loans are interest-free until nine months after separation from the college at which time interest at three per cent per year begins.

The Guaranteed Student Loan Program makes available to students as much as \$2500 per year to a maximum of \$7500 for undergraduate study. Local banks and other lending institutions make these loans at seven per cent annual interest rate. An agency of each state acts as the guaranty agent and also approves the loans. A separate federal interest subsidy pays the interest during the college years for students whose adjusted family income is less than

\$25,000 (for a family of four this is a gross income of \$31,000) or who demonstrate financial need.

EMPLOYMENT

The College provides employment through federal College Work-Study Program as well as from College funds. Students may work a maximum of 20 hours per week on campus though most jobs provide fewer hours.

A number of off-campus opportunities for part-time employment are listed each year by the College Placement Office.

GENERAL

Students should refer to the annual information brochure on Financial Aid Programs for more complete information and instructions. Applications for the college-based programs must be received by the Financial Aid Office no later than March 1, in order to be assured of consideration for aid. The deadline for applications for an Academic or Presidential Scholarship is February 1.

The College uses the Parents' Confidential Statement of the College Scholarship Service to evaluate the financial need of each applicant.

In general, students must register as full-time students to qualify for aid. Students taking at least a half-time load may be able to qualify for some of the federal programs. Each student must maintain the academic and citizenship requirements of the College to retain his financial aid.

Inquiries regarding financial aid should be directed to the Financial Aid Office, Alpha Hall, Elizabethtown College, Elizabethtown, Pennsylvania 17022.

The Academic Program

A student attending Elizabethtown College will find that the academic program is structured to help each person attain a broad general understanding as well as depth of knowledge in a chosen field. The broad general understanding is achieved through the General Education program, which is common to all students wishing to achieve a particular degree. Depth in a chosen field is achieved through the major.

The curriculum of the typical student will include (1) the General Education core, which is common to all students enrolled in a particular degree program, (2) a departmental or interdisciplinary major as specified by the departments in which the major is elected by the students, and (3) elective courses. Some students may elect an area of concentration.

Each student should plan carefully the total college experience in order to achieve the greatest possible good from the many opportunities Elizabethtown offers him.

The College reserves the right to limit the number of courses and sections of courses to be offered in any semester or session.

GENERAL EDUCATION

Care has been taken to allow for considerable choice within General Education. The student should select with understanding to strengthen his total college experience. It is recommended that a student select a program of courses that would lead to focusing upon a theme or idea related to his interests and/or professional aspirations. For example, a student might elect to complete a concentration of courses and fulfill the general education requirements simultaneously. For suggested areas of concentrations outside the major, see the departmental listings for course sequences and descriptions.

Alternatives to the General Education program or deviations from the established program must be approved by the Academic Standing Committee.

Course	B.A. Hours	B.S. Hours	A.S. Hours	
Literature	6	6		Complete En 105 and one other course in English, American, French, Spanish, or German Literature. Courses in Composition, Literary Criticism or Teaching of English <i>do not apply</i> .
			3	Complete En 105.
Modern Language	6			Each student for the B.A. must achieve competency equal to Language 202. For a student with two to three years of high school language this will normally mean six hours of second year college language. Credit will be granted for 101-102 for students who have studied the language in high school provided that the M L proficiency test indicates poor background and the instructor in 101-102 feels that credit should be granted. Credit will be granted for 101-102 if the student begins a new language in college.
Fine Arts	3	3	3	May be fulfilled by any Art course; any of the following Theater courses, Com 151, 252, 257, 268, and the 350 series; any of the following Music courses, Mu 101, 111, 112, 215, 235, 415, 417, or a combination of 3 credits in Applied Music or Ensembles.

Religion and Philosophy	6	6	3	Select any courses in Religion and/or Philosophy with course numbers in the 100 or 200 series.
History	6	6	3	Select Hi 105 and one other history course. Complete Hi 105.
Social Science	9	9	6	Select three courses from among Economics, Political Science, Psychology, Anthropology, or Sociology. Select Psy 105 and Soc 101.
Mathematics	3	6		Credit for Ma 011 or GS 011 is not applicable to the General Education requirement.
Science	8	8		Select from Biology, Chemistry, Earth Science or Physics; two courses in one science or one course in Physics and one in Earth Science. Geography courses do not fulfill the science requirement.
Physical Education	4	4	8	Either Bio 103-104 or Ch 101-104 must be chosen.
			2	Four activity courses must be chosen, at least one (but not more than two) of which must be aquatics. PE 275 and PE 285 <i>do not</i> satisfy core. PE 270 counts as 3 hours toward graduation but fulfills only one activity course. A student may take no more than 3 semesters of Adapted Physical Ed.
Electives	12	12	6	Selected courses to strengthen the overall general educational program according to the student's individual need.

DEPARTMENTAL MAJORS AND AREAS OF CONCENTRATION

Each student should select a major which is a study in depth. It is not necessary in most cases for a new college student to make this decision immediately, but careful consideration is important. Those who have serious questions about their major should elect a broad selection of required General Education courses in the freshman year. This will enhance the understanding of various opportunities for majors and allow time for the decision to be made.

The following is an explanation of catalog course descriptions.

Bio 103 INTRODUCTION TO BIOLOGY
1-5-4

Bio 104 GENERAL BIOLOGY 1-5-4

Bio 103 is the course number and designation and indicates an elementary level course. The number of the course generally reflects the level of instruction

rather than the year taken. INTRODUCTION TO BIOLOGY is the course title.

In 1-5-4, the first numeral (1) signifies the number of 50 minute periods of formal class or recitation meetings a week. The second numeral (5) is the number of 50 minute class periods devoted to laboratories, discussions, and/or clinical work per week. The third numeral (4) signifies the total semester hours credit for the course. In many cases programs and methods of teaching vary from semester to semester.

In the majority of cases, courses whose number ends with a 5 are offered in both semesters; those ending in an odd number are offered in the fall semester, and those ending with an even number are offered in the spring. This is meant to be an aid to students when doing their planning.

Please note that although following listings may

indicate the semester in which the course is to be offered, this schedule is subject to change contingent upon enrollment and/or staff availability. Check with the Registrar's Office for the current semester's offerings.

Credits are expressed in semester hours.

For some courses, prerequisites are necessary. When these are noted, the given course or courses must have been earned prior to registration for the course listed.

For corequisites, a course may have been completed prior to registration for the course in

question or it may be taken simultaneously with that course.

P. O. I. means permission of the instructor. Registration for the course may be made only after securing written permission of the instructor listed to teach the course.

In addition to this catalog, the Program Guide Book, issued each year to all new incoming students, is considered official information. Since the catalog is printed every two years and the Guide Book annually, the latter may contain program and curriculum information which supersedes that in the catalog.



DEPARTMENT OF ART

The academic and the practical courses in the Art program aim to help students refine their creative potential and expand their judgment in visual arts. All studio courses in the two-dimensional and three-dimensional arts are administered by established professional practitioners. No major in art is offered. For education majors proposing to concentrate in art, the department recommends a sequence of courses: Art 211 and 355; and thereafter electives from Art 105, 221, 251, 311, 321, 323, and 324. Physical limitation of class size necessitates instructor's permission for enrolling in a studio course.

COURSE OFFERINGS

Art 105 DRAWING 0-6-3 (c)

Studio practice in basic drawing media for sketching and rendering both live and inanimate subjects.

Art 211 DESIGN AND COLOR 0-6-3 (c)

Studio easel painting, chiefly in opaque media, with stress on pictorial organization and application of color theories.

Art 221 SCULPTURE 0-6-3 (c)

Application of basic sculpture techniques in modeling, carving, and assemblage of various three-dimensional materials. Fall semester only.

Art 251 PRINTMAKING 0-6-3 (c)

Executing several methods of both relief and intaglio plates, and instruction in the operation of the printmaker's machinery. Spring semester only.

Art 321 CERAMICS 0-6-3 (c)

Direct techniques of potting, including wheel operations, hand-building, glazing, and firing; and readings in ceramic history and design.

Art 323 WESTERN ARTS 3-0-3 (c)

Study in the comparative principles of European-American fine and applied arts as manifest in their aesthetic, generic, and socio-philosophic application. Fall semester only.

Art 324 AMERICAN ARTS 3-0-3 (c)

Comprehensive scan of U.S. arts and literature, observing their derivation from social and aesthetic influences. Spring semester only.

Art 355 INTRODUCTION TO ART 3-0-3 (c)

Experience with selected works by major and minor artists of the modern epoch, as a means of achieving skill in recognizing and evaluating artistic style.

Art 371-380 SEMINARS IN FINE ARTS Variable credit. (c)

Art 481-490 INDEPENDENT STUDY IN ART Variable Credit. (c)

(c) Courses applicable to the General Education core requirements.

DEPARTMENT OF BIOLOGY

BACHELOR OF SCIENCE

The curriculum of the Biology Department is designed to acquaint the student with the structural, functional, and environmental aspects of the living world. These objectives are implemented in class, laboratory, field, and individualized instruction. Certain courses are required for broad exposure, however, enough elective time is allowed for students to design individualized programs toward professional, medical, or graduate school education or towards entry into the job market or the teaching profession.

Major Requirements

Required courses for the major are Bio 103, 104, 215, 307, 499, and 13 additional hours in biology including a physiology course and at least one course selected from Bio 204, 205, 207, 209, and 304. Students must also complete Ch 101, 102, 201, 202, and 305, Physics 112, and 211, Math 101 and 121 or Math 117 and 118 as well as a foreign language through the 202 level or through 102 plus Math 151. Ch 301, Bio 499, and language are not required of those completing secondary education requirements. Students must achieve a quality point average of 2.0 in the major area. The major area in biology includes all biology courses and the chemistry, physics, and mathematics courses required by the department.

Secondary General Science Certification

The teaching certificate program in general science with a biology concentration requires: All of the following—Bio 103, 104, 215, 307; one of the following—Bio 204, 205, 206, 207, or 209; and one of the following—Bio 316, 322, or 414.

COURSE OFFERINGS

Bio 103-104 GENERAL BIOLOGY I & II 2-4-4 each (c)

An audiotutorial approach to the study of the unity and diversity of life, cell structure and function, the chemical basis of life and

(c) Courses applicable to the General Education core requirements.

heredity. During the second semester the course deals with invertebrate and vertebrate anatomy, physiology and reproduction; energy relationships, and a survey of the plant kingdom.

Bio 204 PLANT MORPHOLOGY 2-4-4 (c)

A detailed study of lower and higher plant structures. Saturday field trips and plant collection required. Prerequisite: Bio 104 (fall 1977)

Bio 205 MICROBIOLOGY 2-5-4 (c)

A detailed study of the morphology, physiology, and identification of bacteria as well as their relationships with their environment. Prerequisite: Bio 104 & Ch 102

Bio 206 TAXONOMY OF VASCULAR PLANTS 2-4-4 (c)

A laboratory, field and discussion course concerning the classification of vascular plants with emphasis on taxonomic principles, systems of classification, family characteristics, and relationships. Saturday field trips and plant collection required. Prerequisite: Bio 104 or P.O.I.

Bio 207 INVERTEBRATE ZOOLOGY 2-4-4 (c)

A comprehensive study of selected representatives of each of the invertebrate phyla. Saturday field trips and invertebrate collection required. Prerequisite: Bio 104 (fall 1978)

Bio 209 COMPARATIVE ANATOMY OF VERTEBRATES 2-4-4 (c)

A comparative study of morphology of selected chordates considered from an embryological point of view. Prerequisite: Bio 104

Bio 215 GENETICS 3-4-4 (c)

A study of Mendelian and molecular genetics. Prerequisite: Bio 104

Bio 217 HUMAN ANATOMY 2-4-4 (c)

A study of human structure at the tissue, organ, and system levels. Student enrollment will be limited to occupational therapy and pre-nursing majors. Prerequisite: Bio 104 and P.O.I.

Bio 253 HISTOLOGY AND BIO-MEDICAL TECHNIQUE 2-4-4 (c)

A basic microscopic study of vertebrate tissues and routine paraffin sectioning, staining and slide preparation. Prerequisite: Bio 104 & Ch 102

Bio 304 DEVELOPMENTAL BIOLOGY 2-4-4 (c)

Principles of development covering the aspects of change in cellular morphology to gross morphology are considered. Special emphasis is devoted to control mechanisms. Prerequisite: Bio 215

Bio 307 GENERAL ECOLOGY 3-4-4 (c)

The relationships between plants, animals and their environment is studied. Energy flow, mineral cycling, population changes and environmental factors are investigated. Field trips required. Prerequisite: Bio 200 level, Botany and Zoology, or P.O.I.

Bio 314 APPLIED MICROBIOLOGY 2-4-4 (c)

A study of microorganisms as they relate to their natural environment, food processing and contamination, and to public health. Prerequisite: Bio 205 & Ch 201 (spring 1978)

Bio 316 GENERAL PHYSIOLOGY 3-4-4 (c)

A comparative study of vertebrate organs and organ systems considered from a functional point of view. Prerequisite: Bio 209 or 253

Bio 318 HUMAN PHYSIOLOGY 3-4-4 (c)

A functional study of cells, tissues, organs, and organ systems of man. Student enrollment will be limited to occupational therapy and pre-nursing majors. Prerequisite: Bio 209 or 217 and P.O.I.

Bio 322 PLANT PHYSIOLOGY 3-4-4 (c)

A study of plant growth and development, including a discussion of photosynthesis, mineral nutrition, metabolism, water relations and plant hormones. Prerequisite: Bio 204 and Ch 202 or P.O.I.

Bio 371-380 SPECIAL TOPICS IN BIOLOGY Variable Credit (c)

Courses of a specialized nature reflecting the interests of the instructor. Courses offered on a random basis.

Bio 381-390 DIRECTED STUDY IN BIOLOGY TOPICS Variable Credit (c)

Directed study in biological areas in which the student meets regularly with the instructor on an individual basis. Lab work may include self-directing aids. P.O.I.

Bio 414 CELL PHYSIOLOGY 1-4-3 (c)

A chemical and physical approach to the understanding of cell mechanisms. Much independent work is expected of the student. Prerequisite: Bio 104 & Ch 202 (spring 1979)

Bio 481-490 INDEPENDENT PROBLEMS IN BIOLOGY Variable Credits (c)

Designed to allow the student to do independent work and limited research in some phase of biology. Prerequisite: 16 credits in biology and P.O.I. and Department Chairman

Bio 499 SEMINAR IN BIOLOGY 1-0-1 (c)

Students will present laboratory or literature research to the group. Topics will vary from year to year. Prerequisite: 18 hours in biology

Ed 305 PRACTICUM IN SECONDARY EDUCATION: SCIENCE 3-1-4

See Education. (fall 1978)

PRE-NURSING

The College offers the first two years of a baccalaureate nursing program. After successful completion of the freshman and sophomore years, the student transfers to Widener's College of Nursing located at Chester, Pennsylvania, for their Junior and Senior years.

The baccalaureate nursing program is fully accredited by the National League for Nursing.

Persons interested in this program should consult with Dr. Robert Heckman of the Department of Biology.

(c) Courses applicable to the General Education core requirements.

DEPARTMENT OF BUSINESS

BACHELOR OF SCIENCE

BACHELOR OF ARTS

ASSOCIATE OF SCIENCE

The primary objective of the Department of Business is to provide comprehensive programs of professional education for young men and women who wish to achieve responsible positions in private and public business organizations, and in academic institutions. The general objectives are to: (1) prepare contemporary and future leaders, (2) develop a broad understanding of the nature of business and its role in society, (3) enlarge the students' competence in the qualities for success in the business world, and (4) provide the foundation for graduate study, continuing selfeducation and personal development. The various programs offered in the Business Department are based strongly on the tradition of a liberal arts education.

B.S. with major in Accounting—Preparation for entrance into the profession of accounting (public, private or governmental) requires a basic business core in addition to a proficiency in accounting. The increased emphasis upon computer and quantitative techniques by business necessitates guiding students into electing additional courses in these areas.

B.S. with major in Business Administration—Preparation to become tomorrow's business leader requires a broad background in business, knowledge in the behavioral and social sciences, plus the ability to use quantitative techniques in solving problems. This background and these basic tools will evolve from the business core, the general education core, and specific mathematics requirements. Further understanding in a specific area of business will be gained by the student's choice of one of the six areas of concentration: accounting, computer science, economics, health care management, management or marketing.

B.S. with major in Business Education—The Business Education curriculum provides the students who plan to teach in the business department of a secondary school with liberal training in courses outside the field of business, a broad background in business, depth in at least two certification areas in business, and professional education. The professional training will be conducted by personnel who have been secondary business teachers and maintain an awareness of

current developments through close relationships with business departments in area high schools and vocational-technical schools.

B.A. or B.S. with major in Economics—Preparation for a career in economics requires a broad background in basic economic theory coupled with an in-depth study of the quantitative tools so important to today's economist. The economics curriculum is designed to provide the student with this breadth and depth. In light of the increasing emphasis on the quantitative approach to economic theory, students are advised to select courses in mathematics and computer science beyond those specifically required in the economics curriculum.

A.S. with major in Medical Secretarial Science—This two-year program prepares students for employment in a medical office, a dental office, a hospital, or other health care facility. The curriculum includes a liberal arts core along with pertinent secretarial skills and a series of Medical Secretarial courses. The program is designed to provide the student with a foundation in the behavioral and social sciences, the liberal and fine arts, as well as specific training for the Medical Secretary profession.

B.S. with major in Accounting or Business Administration may be earned in the evening program of the college. For further information see special Evening Session bulletin.

ACCOUNTING

A major in Accounting will include Ac 105-106 (or Ac 107-108), Ac 205-206, Ac 305-306, 12 additional semester hours in Accounting, BA 215, BA 248, BA 265, BA 325, BA 331-332, CS 125, Ec 101-102, Ma 117 (or Ma 121), and Ma 151. Additional courses in Mathematics and Computer Science are recommended as electives.

BUSINESS ADMINISTRATION

A major in Business Administration will include Ac 107, Ac 108, (or Ac 105-106), BA 215, BA 248, BA 265, BA 325, BA 331-332, CS 125, Ec 101-102, Ma 117 (or Ma 121), and Ma 151. Each student must also choose a concentration in one of the following areas: Accounting, Computer Science, Economics, Health Care Management, Management, or Marketing. Twelve semester hours beyond those listed above must be taken in the concentration area (9 of those 12 hours must be taken on the Elizabethtown College Campus). If the Accounting concentration is chosen, Ac 205-206 and Ac 305-306 are recommended. If the Computer Science concentration is chosen, CS 309 and CS 341 are required. If the Economics concentration is chosen, Ec 301 and Ec 302 are recommended. If the Management concentration is chosen, BA 369 and BA 499 are required. If the Marketing concentration is chosen, BA 311 and BA 498 are required. If the Health Care Management concentration is chosen, the courses for the major are Ac 107, Ac 108, BA 215, BA 248, BA 265, BA 325, BA 331, CS 125, Ec 101-102, Ma 117 (or Ma 121), Ma 151, HC 311, HC 312, HC 321, HC 322, HC 472, PSY 105, an applied psychology course, and two courses chosen from BA 369, BA 467, BA 468, BA 499, CS 341, Ec 304.

BUSINESS EDUCATION

A major in Business Education will include Ac 105-106, BA 215, BA 331-332, BEd 111, BEd 421, CS 125, Ec 101-102, Ma 151, PSY 105, and the professional education program for secondary certification. Each student must also choose two or more of the following certification areas: Accounting, Computer Science, Marketing, Secretarial, Typewriting. Speech proficiency is also required.

Business Education majors may receive credit in shorthand and typewriting by examination. This regulation does not apply to BEd 301 and BEd 311. Based on the results of an examination the student may be given credit for either BEd 101 or BEd 201 and will be advised for additional courses needed in shorthand. The same will apply for typewriting with possible credit in BEd 111 or BEd 212.

ECONOMICS

A major in Economics will include Ec 101-102, Ec 201, Ec 301, Ec 302, 15 additional semester hours in Economics, BA 248,

CS 125, Ma 151, Ma 121 or Ma 117-118, 9 semester hours of history, and 9 semester hours of political science and/or sociology. Ac 107-108 are recommended electives.

A student may choose Economics as either a major or minor area in the comprehensive Social Science program. If the student desires secondary certification the major area includes Ec 101-102 and 18 additional semester hours in Economics; the minor area includes Ec 101-102 and 6 additional semester hours in Economics. If the student does not desire secondary certification, the major area includes Ec 101-102, Ec 301, Ec 302, and 12 additional semester hours in Economics; the 15 hour minor area includes Ec 101-102, Ec 301, or Ec 302, 6 additional semester hours in Economics; the 3 hour minor area in Ec 101.

MEDICAL SECRETARIAL SCIENCE

The requirements for the associate degree in Medical Secretarial Science will include BEd 212, BEd 221, BEd 223, MS 101, MS 109, MS 211, MS 219, MS 272, CH 101-104 or Bio 103-104, COM 105, EN 105, HI 105, SO 101, PSY 105, 2 semester hours in Physical Education, and 3 semester hours each in Fine Arts and Religion/Philosophy. A 2.25 q.p.a. in major (BEd and MS courses) is required prior to MS 272. This 2.25 q.p.a. is also a graduation requirement.

AREA OF CONCENTRATION FOR ELEMENTARY EDUCATION MAJORS

The 18-semester hour area of concentration for an Elementary Education major may be completed in the area of Business Administration or Economics. If Business Administration is chosen the requirements are Ac 107, BA 265, BA 369, CS 125, and Ec 101-102. If Economics is chosen the requirements are Ec 101-102, CS 125, 3 additional 3-semester hour courses in Economics.

COURSE OFFERINGS

ACCOUNTING

Ac 105-106 PRINCIPLES OF ACCOUNTING 3-0-3 Each

Introductory course for students who intend to continue in accounting courses. First semester: the accounting cycle, financial



statements, current assets, and a practice set. Second semester: fixed assets, liabilities, equity accounts, ratio analysis, and introduction to cost accounting.

Ac 107 FINANCIAL ACCOUNTING 3-0-3

An introductory course designed to acquaint the student with the basic accounting methodology and the structure and interpretation of financial statements used in external reporting.

Ac 108 MANAGERIAL ACCOUNTING 3-0-3

Uses the information gathered from accounting records and other information sources to prepare internal reports and analyses to assist management in control and decision making. Prerequisite: Ac 107.

Ac 205-206 INTERMEDIATE ACCOUNTING 3-0-3 Each

A thorough study of the various accounting concepts and generally accepted accounting principles; theories on income determination; the presentation of statements of financial position, results of operations, and the changes in financial position. Prerequisite: Ac 106 or P.O.I.

Ac 301 INTRODUCTION TO FEDERAL INCOME TAXES 3-0-3

A study of the provisions of the Internal Revenue Code applicable to individual taxpayers. Students without a business background are encouraged to enroll.

Ac 302 ADVANCED TAX ACCOUNTING 3-0-3

Further study of the Internal Revenue Codes as it relates to partnerships, corporations, trusts and estates, and exempt organizations. State taxation of business is also covered. Prerequisites: Ac 205, Ac 301.

Ac 305 COST ACCOUNTING 3-0-3

A study of the quantitative aspects of managerial cost accounting, including cost-volume-profit analysis, budgeting, standard costs, and the concept of relevant costs. Prerequisite: Ac 106 or Ac 108; or P.O.I.

Ac 306 ADVANCED COST ACCOUNTING 3-0-3

A continuation of the managerial emphasis on cost accounting including capital budgeting, inventory control, joint-and-by-product costing, and process cost accounting. Prerequisite: Ac 305.

Ac 370-379 SPECIAL PROBLEMS 3-0-3

A course designed to allow students to explore topics and problems of current relevance in accounting.

Ac 405 AUDITING 3-0-3

A study of the legal and ethical responsibilities of an auditor, the methods and procedures used in gathering evidential material, and the auditor's report. Prerequisite: Ac 206. (Fall)

Ac 406 ADVANCED ACCOUNTING 3-0-3

A detailed study of various accounting topics, including consolidations, partnerships, estates and trusts, consignments, and price-level financial reporting. Prerequisite: Ac 206. (Fall)

Ac 409 CONTEMPORARY PROBLEMS FOR C.P.A.'s 3-0-3

A capstone course in accounting designed to assimilate the widely varying aspects of public accounting and update the student in the latest standards and problems. Prerequisites: Ac 302; 306; 405; and 406; or P.O.I. (Spring)

Ac 471 INTERNSHIP IN ACCOUNTING Variable Credit

A series of work experiences in accounting with either a public accounting firm, a business firm, or governmental agency. Prerequisite: Approval of Department Chairman.

Ac 480-489 INDEPENDENT STUDY Variable Credit

Designed to allow the student to do independent study and research on a problem or topic in the field of accounting. Prerequisite: Approval of Department Chairman and Dean of the Faculty.

Ac 499 SEMINAR IN ACCOUNTING 3-0-3

A study of selected topics currently under discussion in the accounting field. A major research project will be required. Prerequisite: P.O.I.

BUSINESS ADMINISTRATION**BA 215 PRINCIPLES OF MARKETING 3-0-3**

Involves strategies employed in marketing; describes the distribution function; analyzes basic marketing functions; describes government's role in marketing; and studies social responsibility. Prerequisites: Ac 106 or Ac 108; Ec 101; Pre- or Co-requisite: Ec 102; or P.O.I.

BA 248 QUANTITATIVE TECHNIQUES FOR BUSINESS 3-0-3

Designed to develop familiarity with statistical and mathematical methods applicable to business. Includes: break-even analysis, Bernoulli and Bayesian probability, inventory models, and linear programming. Prerequisites: Ma 151; Ma 117.



BA 265 PRINCIPLES OF MANAGEMENT 3-0-3

A study of the process of utilizing and coordinating technical and human resources in planning, organizing, staffing, motivating and controlling to achieve an organization's objectives.

BA 311 PRINCIPLES OF MARKETING RESEARCH 3-0-3

Employs scientific research methodology to solve marketing problems. Covers research design, data collection, sampling, and analysis. Stresses writing meaningful reports for management use. Prerequisites: BA 215; Ma 151.

BA 312 PRINCIPLES OF ADVERTISING 3-0-3

Involves the creative and business management aspects of advertising including campaign strategy, mass media, the advertising agency, creative techniques, advertising research, and social accountability. Prerequisite: BA 215 or P.O.I.

BA 313 RETAILING MANAGEMENT 3-0-3

A study of retailing institutions including institutional location, layout, managerial objectives and policies, consumer behavior, pricing and promotional strategies, consumer services, and expected trends. Prerequisite: BA 215; BA 265.

BA 316 MARKETING MANAGEMENT 3-0-3

Entails the formulation of overall marketing policies and synthesizes planning techniques for embodying these policies in marketing programs. Case analysis is stressed. Prerequisite: BA 215; BA 248; BA 265.

BA 325 BUSINESS FINANCE 3-0-3

Analyzes the management of funds of a business. Includes long and short-term sources of funds, capital budgeting, cash budgeting, ratio analysis, and capital markets. Prerequisites: Ac 106 or Ac 108; BA 248.

BA 331-332 BUSINESS LAW I and II 3-0-3 Each

The study of legal principles applicable to business. Emphasis is placed upon contract law in the first semester. The second semester continues the study of legal principles in relation to business with emphasis upon partnership, corporation and property law.

BA 369 BEHAVIORAL THEORY IN MANAGEMENT 3-0-3

The course provides detailed examination of basic motivational theories, examination of behavioral models based on these theories, and the practical application of these models. Prerequisites: Psy 105; BA 265.

BA 370-379 SPECIAL PROBLEMS 3-0-3

A course designed to allow students to explore topics and problems of current relevance in business.

BA 424 INVESTMENTS 3-0-3

Emphasis placed on various classes of investments available to the investor; sources and uses of investment information and security and market evaluation. Prerequisite: BA 325 or P.O.I.

BA 466 PRODUCTION MANAGEMENT 3-0-3

A critical study of decision-making techniques, emphasizing practical application of scientific methods to production activities. Includes resource allocation, production cycle, work simplification, plant layout and process control. Prerequisites: BA 248; BA 369; Ec 102.

BA 467 PERSONNEL ADMINISTRATION 3-0-3

Analysis of the principles, concepts and practices of procurement, development, maintenance and utilization of personnel in organizations. Prerequisite: BA 369. (spring)

BA 468 INDUSTRIAL AND LABOR RELATIONS 3-0-3

Analysis of employment relationships, union philosophy, structure and function, collective bargaining and the interrelated interests of management, union, workers and the community. Prerequisite: BA 467 or P.O.I. (fall)

BA 480-489 INDEPENDENT STUDY Variable Credit

Designed to allow the student to do independent study and research on a problem or topic in the field of business. Prerequisite: Approval of Department Chairman and Dean of the Faculty.

BA 498 SEMINAR IN MARKETING 3-0-3

Synthesizes the literature in consumer behavior, quantitative methods in marketing, and policy issues. Ties together all areas of marketing. Prerequisites: BA 215 and P.O.I.

BA 499 SEMINAR IN MANAGEMENT 3-0-3

Advanced study focusing on current management concepts and contemporary problems in the business enterprise. Various topics will be selected in the area of the students' interest. Prerequisites: BA 248; BA 265; BA 369; two other courses required for the management concentration; or P.O.I.

BUSINESS EDUCATION**BEd 101 ELEMENTARY GREGG SHORTHAND 3-0-3**

Presenting the theory of Gregg Shorthand, this course teaches students to read and write shorthand rapidly and accurately. (For students with no training in shorthand.)

BEd 111 ELEMENTARY TYPEWRITING 3-1-3

Fundamental typewriting techniques: machine operation, keyboard technique, letter forms, tabulation, manuscript form. (For students with no formal training on the typewriter.) (fall)

BEd 201 INTERMEDIATE GREGG SHORTHAND 3-0-3

An intensive study of Gregg Shorthand; emphasis upon developing the student's ability to take dictation on unfamiliar material rapidly, and to transcribe accurately at the typewriter. Prerequisites: BEd 101; BEd 111; or P.O.I.

BEd 212 INTERMEDIATE TYPEWRITING 3-0-3

A concentrated training on the typewriter; business letters, special communication forms, technical papers, business reports, tables, business forms, executive communications and application forms. Prerequisite: BEd 111 or P.O.I. (spring)

BEd 221 MATHEMATICS FOR BUSINESS 3-0-3

Review of fundamental processes, with emphasis on accuracy and speed in computations. These skills are applied to problem solving in personal and business situations. (Enrollment limited to Business Education and Medical Secretarial students.)

BEd 223 BUSINESS COMMUNICATIONS 3-0-3

Emphasis is on effective and functional written and oral business communications. (Enrollment limited to Business Education and Medical Secretarial students.)

BEd 301 ADVANCED GREGG SHORTHAND 3-0-3

A thorough review of shorthand theory, dictation and transcription practices. Emphasis given to methods and materials used in teaching shorthand in the secondary school. Prerequisites: BEd 201; BEd 212; or P.O.I. (Enrollment limited to Business Education students.)

BEd 311 ADVANCED TYPEWRITING 3-0-3

The building of production-level skill with emphasis given to methods and materials used in teaching typewriting in the secondary school. Prerequisite: BEd 212 or P.O.I. (Enrollment limited to Business Education students.)

BEd 370-379 SPECIAL PROBLEMS 3-0-3

A directed learning experience designed to allow students to explore current topics of special relevance in the field of business education.

BEd 421 OFFICE PRACTICE 3-0-3

The study of methods and materials for teaching secretarial procedures and business machines. Prerequisite: BEd 111 or P.O.I. (Enrollment limited to Business Education students.) (fall only)

BEd 480-489 INDEPENDENT STUDY Variable Credit

Designed to allow the student to do independent study and research on a problem or topic in the field of business education. Prerequisite: Approval of Department Chairman and the Dean of the Faculty.

Ed 305 PRACTICUM IN SECONDARY EDUCATION: BUSINESS 4 credits

A thorough consideration of the methods of teaching basic business subjects in secondary schools including the selection and adaptation of curriculum materials. (Enrollment limited to Business Education students.) (Also see Department of Education, Ed 305.) (spring only) (Co-requisite Ed 225e)

Ed 472 PROFESSIONAL INTERNSHIP, SECONDARY 16 credits

(See Department of Education, Ed 472)

COMPUTER SCIENCE

CS 105 TIMESHARING CONCEPTS (5 week course) 3-0-1

Introduction to the timesharing use of computer systems and to system components. Included is a study of text editors for creating and editing user files.

CS 106 BASIC PROGRAMMING (5 week course) 3-0-1

Course content introduces the student to language concepts necessary to write simple programs in **Beginners' All-purpose Symbolic Instruction Code**, a language suited for timesharing. (Students planning to take CS 125 should not enroll in this course.)

CS 108 INTRODUCTION TO FORTRAN PROGRAMMING (5 week course) 3-0-1

An introduction to the **FORTRAN (FORmula TRANslation)** language, statements, and features with emphasis on its use in algorithmic problem-solving. Prerequisite: CS 105.

CS 109 INTRODUCTION TO COBOL PROGRAMMING (5 week course) 3-0-1

This course introduces the student to the **Common Business Oriented Language, COBOL**. The elements of the language are discussed and used to solve business problems. Prerequisite: CS 105.

CS 121 PRINCIPLES OF UNIT RECORD PROCESSING (5 week course) 3-0-1

A study of data processing utilizing unit record equipment. Various types of equipment will be discussed with emphasis placed on the keypunch and sorter.

CS 125 INTRODUCTION TO COMPUTER PROCESSING 3-0-3

An overview of computers in our society, including history, components, logic, and uses of computers. A thorough study of **BASIC** programming concepts is presented. (Students who passed CS 106 will be given only 2 credits.)

CS 208 ADVANCED FORTRAN PROGRAMMING (5 week course) 3-0-1

Examines the advanced features of the language with emphasis on

advanced input/output techniques, file handling and plotting. Prerequisite: CS 108.

CS 209 ADVANCED COBOL PROGRAMMING (5 week course) 3-0-1

Continues the study of this business language by studying topics such as perform statements, table handling techniques and file handling concepts. Prerequisite: CS 109. (Spring)

CS 309 PROGRAMMING BUSINESS APPLICATIONS 3-0-3

An advanced study of **COBOL** features including **ISAM**, **Report Writer**, and **SORT**. Several programming assignments illustrate the sophisticated use of language in the business environment. Prerequisites: CS 209 or P.O.I. (Alternate years)

CS 312 SYSTEMS PROGRAMMING AND ASSEMBLY LANGUAGE 3-0-3

In-depth study of assembly level languages including **SIMBAL (Simulated BAL)** and **MACRO-10**. The functions, overall structure, and logic of various systems programs will be discussed. Prerequisites: CS 105, CS 125.

CS 333 COMPUTER SYSTEMS INTERFACING 1-6-3

A comprehensive study of how computers can be interfaced with one another, with scientific experiments, and with other peripheral devices. Prerequisites: CS 312 or P.O.I.

CS 341 SYSTEMS ANALYSIS AND DESIGN 3-0-3

Analysis and design of computer-based and manual systems. The analysis will include a study of information requirements, design approaches, processing methods and data management systems. Prerequisite: CS 125.

CS 370-379 SPECIAL PROBLEMS 3-0-3

A course designed to allow students to explore topics and problems of current relevance in Computer Science. Prerequisite: P.O.I.

CS 413 SYSTEMS SIMULATION 3-0-3

Introduction to simulation techniques, stochastic processes, queuing theory, optimization models and data analysis using both a

higher-level programming language and specialized simulation languages. Prerequisites: CS 106 (or CS 125), CS 108, MA 151 or MA 351) or P.O.I. (Alternate years)

CS 471 INTERNSHIP IN COMPUTER SCIENCE Variable Credit

Work experiences designed to supplement course work with real-world applications. By working for business, school or government, the student gains valuable knowledge unavailable from textbooks. Prerequisite: Approval of Department Chairman.

CS 480-489 INDEPENDENT STUDY Variable Credit

Designed to allow the student to do independent study and research on a problem or topic in the field of Computer Science. Prerequisite: Approval of Department Chairman and Dean of the Faculty.

ECONOMICS

For Accounting, Business Administration or Business Education majors, all economics courses except Ec 101-102 are eligible for core. For all other students, all economics courses are eligible for core.

Ec 101-102 PRINCIPLES OF ECONOMICS I AND II 3-0-3
Each (c), See above.

Principles and problems of economics. First semester: supply and demand, United States economic system, national income accounting, employment theory, fiscal policy, money and banking, monetary policy. Second semester: elasticity, consumer behavior, production costs, market structures (competition, oligopoly, monopoly), resource pricing, additional selected topics.

Ec 201 INTRODUCTION TO MATHEMATICAL ECONOMICS 3-0-3

An application of algebra and elementary calculus to further elaborate economic concepts and problems. Prerequisites: Ec 101-102; Ma 121 or Ma 117 (Offered 1977-78).

Ec 301 INTERMEDIATE MICROECONOMIC THEORY
3-0-3 (c)

An in-depth study of corporate decision-making and resource allocation within the economic environment of free enterprise. Prerequisites: Ec 101-102; Ma 121 or Ma 117 (Offered 1978-79).

Ec 302 INTERMEDIATE MACROECONOMIC THEORY
3-0-3 (c)

Development of macro-economic theories of output, employment,



(c) courses applicable to the General Education core requirements.

inflation and growth; monetary and fiscal policies and analysis. Prerequisites: Ec 101-102; Ma 121 or Ma 117 (Offered 1977-78).

Ec 303 MONEY AND BANKING 3-0-3 (c)

A study of the United States money and banking systems; commercial banking, the Federal Reserve System, monetary theory and policy, interest rates, money markets, etc. Prerequisite: Ec 101-102 or P.O.I.

Ec 304 PUBLIC FINANCE 3-0-3 (c)

An application of macroeconomic theory to the problems of Federal, State and Local taxation, expenditures and debt management. Prerequisite: Ec 101.

Ec 306 DEVELOPMENT OF ECONOMIC THOUGHT 3-0-3 (c)

The historical and philosophical evolution of economic ideas and schools of thought from Smith, Ricardo and Marx to Marshall and Keynes.

Ec 307 INTERNATIONAL ECONOMICS 3-0-3 (c)

The basic concepts of international trade, international payments, and commercial policy. A combination of economic theory, policy and practice. Prerequisite: Ec 101-102 or P.O.I.

Ec 308 COMPARATIVE ECONOMIC SYSTEMS 3-0-3 (c)

Examination, criticism and appraisal of alternative economic systems; capitalism, socialism, communism and mixed economic systems. Prerequisites: Ec 101 or P.O.I.

Ec 370-379 SPECIAL PROBLEMS 3-0-3 (c)

A course designed to allow students to explore topics and problems of current relevance in economics.

Ec 480-489 INDEPENDENT STUDY Variable Credit (c)

Designed to allow the student to do independent study and research on a problem or topic in the field of economics. Prerequisite: Approval of Department Chairman and Dean of the Faculty.

HEALTH CARE MANAGEMENT

HC 311 ORGANIZATIONS AND AGENCIES OF HEALTH CARE 3-0-3

An overview of agencies and organizations which influence the delivery of health care. Roles and functions of health providers and consumers.

HC 312 INSTITUTIONAL FACILITY PLANNING AND DESIGN 3-0-3

Community planning and design for adequate health protection. Design and construction of special needs of health facilities.

HC 321 HEALTH SERVICES AND MEDICAL TEAM APPROACH 3-0-3

Medical team approach to health care. Roles of various individual groups as they distribute services to consumers. (Offered fall 1977.)

HC 322 HEALTH LAWS, ISSUES AND PUBLIC POLICIES 3-0-3

An examination of important laws, issues and public policies pertinent to health care management, with attention to regulatory authority, liability, social policy and operation of programs. Prerequisite: P.O.I. (Offered spring 1978.)

HC 472 INTERNSHIP 12 credits

The student will be placed in a practical setting within a nursing home or hospital for a period of approximately one semester.

MEDICAL SECRETARIAL SCIENCE

MS 101 MEDICAL OFFICE PROCEDURES 3-0-3

Simulation approach to medical office procedures, office protocol, etc. Prerequisites: BEd 111; BEd 223 or P.O.I. (Enrollment limited to Medical Secretarial students.) (spring)

MS 109 MEDICAL ACCOUNTING-BOOKKEEPING 3-0-3

Examines standard record-keeping and bookkeeping for doctors and dentists. Financial statements and reports unique to the medical profession will also be studied. (Enrollment limited to Medical Secretarial students.)

MS 211 MEDICAL TERMINOLOGY 3-0-3

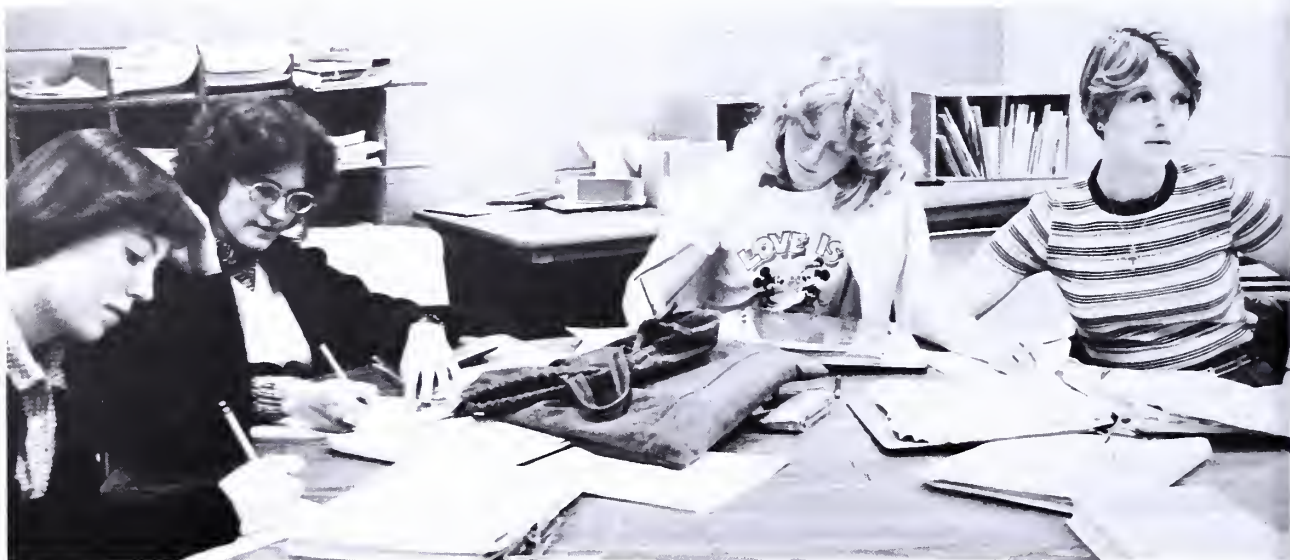
Provides the basic tools for building a medical vocabulary and acquainting the students with medical terms as they pertain to anatomy, physiology, and disease. (Enrollment limited to Medical Secretarial students.)

MS 219 MEDICAL TYPEWRITING 3-0-3

A course designed to cover specific details of typing required by the medical profession. Prerequisites: BEd 212, MS 101; or P.O.I (Enrollment limited to Medical Secretarial students.) (fall)

MS 272 PRACTICUM 6 credits

The student will be placed in a hospital, a doctor's office, a dentist's office, or some other health care facility for practical experience for a portion of the semester.



DEPARTMENT OF CHEMISTRY

Chemistry may be studied at Elizabethtown as a field of specialization leading to a career in industry as a chemist or in chemical research in industry or the academic world or as preparation for careers in the professions of medicine, medical technology, chemical management, law, teaching at the elementary or secondary levels, and many other endeavors.

Standard programs, including one approved by the Committee on Professional Training of the American Chemical Society, are available in these areas and individual programs may be formulated to suit the student's goals by consultation with the student's advisor and the department chairman. Students planning much work in the Department of Chemistry should consult with a departmental advisor as early as possible to plan the sequence of courses in chemistry, mathematics, physics, language and allied sciences which will be to their greatest advantage. Many upper level chemistry courses have calculus and physics courses as prerequisites making it desirable to have these early. The sequence for secondary education also requires early planning to insure the proper spacing of education courses.

The curriculum preparing students for medical technology is in cooperation with American Medical Association accredited hospitals. A student who completes the three year curriculum (100 semester hours) successfully and a twelve month period of study in an American Medical Association and Elizabethtown College approved hospital, will be granted a B.S. Degree upon the recommendation of the Pathologist or teaching supervisor of the approved hospital and the Program Director of the College.

Elizabethtown College is affiliated with Harrisburg Hospital, York Hospital, Lancaster General Hospital, St. Joseph Hospital (Lancaster), Polyclinic Hospital (Harrisburg), West Jersey Hospital (Voorhees, NJ), and Abington Hospital. These affiliations are recorded with the National Accrediting Agency for Clinical Laboratory Sciences. Admission to these and other approved hospitals is on a competitive basis. A student may complete a fourth year (optional) on campus prior to entering the clinical year. An additional 28 semester hours are required and the B.S. Degree will be granted upon successful completion of the four year college program.

Curriculum

All curricular options in the Department of Chemistry, except the three year medical technology option, require the CORE of courses listed on page 19 for the B.S. Degree, the specific chemistry and related science courses listed below, plus elective courses to equal 128 semester hours

(a) The American Chemical Society approved option, preparing the student for a career in industry or for graduate school requires Ch 101-2, 201-2, 341, 343, 344, 351-2, 402, 421 and 451 or 481. Related courses in which competency is required at the level indicated are Modern Language (Ge preferred or Ru or Fr) 202, CS 103, 105, 107 Ma 201, 222 and Phy 232.

(b) The pre-medical option is the same as the above except that the student may elect four additional credits of advanced biology in place of Ch 451 or 481, is required to take Bio 103-4 and two advanced biology courses, is not required to take Ma 201, Ch 402 or Ch 421, and is required to demonstrate competency at the Phy 231 level.

(c) The secondary education option requires those chemistry courses listed in the ACS approved curriculum except Ch 402, 421, 451 and/or 481. Related courses in which competency is required at the level indicated are Modern Language (Ge preferred) 202, CS 103, 105, 107, Ma 222, Phy 231, Psy 105, Ed 215, 305, 472.

(d) The chemistry-management option requires the same chemistry courses as the secondary education option. Related courses in which competency is required at the indicated level are Modern Language (Ge preferred, Ru, Fr) 202, CS 103, 105, 107, Ma 222, Phy 231, Ac 107, BA 215, 325, 332, 361, 366, 466, Ec 102.

(e) The medical technology three year option requires Ch 101-2, 201-2, 305, 325 (Ch 315 recommended). Related courses in which competency is required at the indicated level are Bio 103, 104 and 205, plus 209 or 215 or 217 or 314 or 316 or 318, Phy 112, Ma 101 or 121.* Core and electives must total 100 semester hours. The clinical internship minimum is an additional 28 semester hours. The four year medical technology option requires additionally Ch 315, one additional course in biology, Ma 151, and core and electives to total 128 semester hours.

The instruction during the clinical year will cover the areas of Chemistry (Urinalysis), Pulmonary Function (Radioisotopes), Microbiology (Parasitology, Mycology, Serology, Virology) and Hematology (Coagulation, Blood Bank). Lectures in medical ethics, management, medical terminology, laboratory mathematics and anatomy may be given. Experience in the various clinical laboratories is also provided. Each hospital school of medical technology varies slightly in exact titles and course descriptions. In most cases these course descriptions are available from the program director, Miss Proctor.

(f) The chemical physics option requires Ch 101-104, 201, 341 (or Phy 403), 343, 344, 351-2. Related courses in which competency is required are Modern Language (Ge preferred) 202,

*In this curricular option, Ma 101 or Ma 121 is defined as meeting the core requirement for mathematics instead of 6 credits.

CS 103, 105, 107, Ma 201, 222, 321 (or 362), Phy 232, 344 plus two courses (minimum of seven semester hours) from the following: Ch 402, 421, 451, 481, Ma 362, Phy 404, 407, 408, 490.

COURSE OFFERINGS

Ch 101, 102, 104 GENERAL CHEMISTRY 3-3-4 each (c)

A study of the principles of chemistry from the viewpoint of modern theory of atomic and molecular structure. Ch 101 (prerequisite, high school algebra or equivalent) (Fall), is a prerequisite for Ch 102 and 104. Ch 102 (Spring) treats in detail the principles of chemical equilibria in aqueous solutions and is designed for students who plan to take additional courses in chemistry. Ch 104 (Spring) is designed for students who will take no further chemistry and includes brief treatments of organic chemistry and other selected topics which are studied in depth in advanced courses.

Ch 201-202 ORGANIC CHEMISTRY 3-3-4 each (c)

A study of the compounds of carbon, aliphatic and aromatic, their properties, synthesis, structures, uses and mechanisms of their reactions and applications of instrumental methods. Prerequisite: Ch 102 (Fall-Spring)

Ch 305 QUANTITATIVE ANALYSIS 2-8-4 (c)

Principles and practices of chemical analysis by gravimetric, volumetric, colorimetric and instrumental methods. Methods and determinations chosen to be appropriate to the student's major. Prerequisites: Ch 102, Ma 101 or equivalent (Spring and Fall)

Ch 315 INSTRUMENTAL ANALYSIS 2-8-4 (c)

Analysis with modern instruments and techniques including mainly spectrophotometry, potentiometry, gas chromatography and electronics. Emphasis is on chemical and physical theories that make instrumental methods useful. Prerequisite: Ch 305 (spring and fall)

Ch 325 BIOCHEMISTRY 2-6-4 (c)

An introduction to the chemistry of living matter including principles and experimental techniques required to understand the

structures, properties and metabolism of proteins, lipids, carbohydrates and nucleic acids. Prerequisite: Ch 202 and 305 or 351 (spring and fall)

Ch 341 CHEMICAL EQUILIBRIUM AND KINETICS 3-0-3 (c)

An introduction to thermodynamics as applied to chemical equilibria in ideal and non-ideal, homogeneous and heterogeneous systems; ionic solutions and electrochemistry; rate equations and their molecular basis. Prerequisite: Ch 102, Ma 322, Phy 231 (fall)

Ch 343 INTRODUCTION TO QUANTUM THEORY 3-0-3 (c)

An introduction to the principles of quantum theory, radiation, atomic spectra, and the extranuclear structure of the atom. Prerequisite: Ch 102, Ma 222, Phy 211 or 231 (fall)

Ch 333 COMPUTER SYSTEMS INTERFACING 1-6-3

Digital logic and integrated circuits to implement logic; architecture and machine language programming of minicomputers and microprocessors; design, testing and construction of instrument-to-computer and computer-to-computer interfaces; design and testing of supporting software.

Ch 344 CHEMICAL BONDING AND THE STRUCTURE OF MATTER 3-0-3 (c)

Includes ionic bonding, the valence-bond and molecular orbital theories of covalent bonding and intermolecular forces; spectroscopic and diffraction methods of determination of molecular structure; liquid and solid states of matter. Prerequisite Ch 343 or (Ch 102 or 104, and Phy 403) (spring)

Ch 351, 352 ADVANCED CHEMISTRY LABORATORY I 2-8-4 II 1-12-4 (c)

Ch 451 ADVANCED CHEMISTRY LABORATORY III 0-16-4 (c)

A sequence of courses integrating synthetic, analytical, physical organic, inorganic, biochemical, and radiochemical laboratory practices. Individual problems may require from three to ten weeks. The chemical literature, digital computers, and statistical methods are introduced during the first semester and used extensively thereafter. Use of modern instrumentation such as the infrared spectrophotometer, gas chromatograph, x-ray diffractometer

(c) Courses applicable to the General Education core requirements.

NMR spectrometer, and analog computer is required on an individual basis. By the time a student has completed Ch 451 he should be familiar with the basic laboratory practices appropriate for a chemist at the Bachelor's level. Prerequisites: I, II—CS 105, Ch 202; Corequisites Ch 341, 343 (Fall-Spring); III—Ch 352 (Fall)

Ch 371-380 SPECIAL TOPICS IN CHEMISTRY Variable Credit (c)

Study of an advanced topic, experimental or theoretical, of special interest to the student. Prerequisite: P.O.I. and Department Chairman

Ch 402 ADVANCED INORGANIC CHEMISTRY 3-0-3 (c)

A study of the elements and their compounds based upon atomic and molecular structures. Prerequisite: Ch 344 (spring)

Ch 421 ADVANCED ORGANIC CHEMISTRY 3-0-3 (c)

A study of organic reactions based upon experimental and advanced theoretical studies. Prerequisite: Ch 202 and 344 (fall)

Ch 481-482 RESEARCH IN CHEMISTRY 0-16-4 or more each (c)

An original experimental or theoretical investigation under the close supervision of a faculty member. Experimental design and a written report are required. Prerequisite: Ch 352 and P.O.I.

(c) Courses applicable to the General Education core requirements.



DEPARTMENT OF COMMUNICATION ARTS

The aim of the Communication Arts Department, involving programs in broadcasting, film, journalism, speech, and theatre, is to assist students in developing their ability to communicate effectively in a democratic society, and to build meaningful and productive lives on personal, interpersonal, and public levels. Career possibilities include positions in advertising, sales, public relations, business-industrial communications, broadcasting, theatre, newspaper-magazine writing and reporting; occupations in government, law, ministry, counseling, education, management, public and social service. The department offers college-wide activities including play production, speech activities, and radio broadcasting with W.W.E.C., the campus radio station.

The 42 credit hours required for a B.A. in Communication Arts include Com 105, 141, 151, 231, plus 15 hours of electives within the department. The remaining 15 hours should be taken from other college departments (preferable in Business, Social Sciences, or Humanities), from courses within the department, or a combination thereof, but must be at the 200 level or above. The student is required to submit *in writing* to his advisor a list of courses intended to fill this 15 hour requirement prior to his senior year.

Requirements for a major with Secondary education Certification include 24 hours in one of three tracks (Speech-Mass Communications, Theatre, or Literature), plus 18 hours of required courses. The required courses include Com 105, ML 331 or 387, En 100, and En 200. If the chosen track is Literature, the remaining six hours are to be in Communication Arts courses. If the track is either Speech-Mass Communications, or Theatre, the remaining six hours are to be in Literature. Secondary Education Certification majors may not be exempted by competency tests from English composition courses or the basic speech course.

Every major must observe the following requirements: *Students are required to maintain an overall 2.0 G.P.A., plus a 2.5 G.P.A. in their major.* Students may not count a course towards requirements of the major and also towards requirements for the General Education Core; one course may only fulfill one requirement. The student is advised that the 12 hours of electives given him in the General Education Core should be taken in upper-level courses (200 or above) from the departments specified in the General Education Core; no survey (100 level) courses are permitted. All majors are expected to participate actively in the various extra-curricular activities sponsored by the department.



COURSE OFFERINGS

*Broadcasting***Com 141 INTRODUCTION TO MASS COMMUNICATION 3-0-3**

An examination of the impact of Mass Media (magazines, newspapers, comic books, film, radio, and television) on society, with particular emphasis on television.

Com 248 WRITING FOR RADIO AND TELEVISION 3-0-3

A basic course to introduce the student to the varied kinds of on-air writing within the broadcasting industry. Prerequisite: Majors must have taken Com 141.

Com 347-348 BROADCAST INSTITUTE 3-6-6 Each

Instruction in the basics of radio and television production at Ra-O-Vision Broadcast-Telecast Institute of Elizabethtown. First semester includes radio techniques and F.C.C. requirements. Second semester includes television techniques. Prerequisite: Com 141 and P.O.I.

Com 440 RADIO-TELEVISION PRODUCTION 2-2-3

Principles and theories of advanced radio and television production. Commercial, News, Documentary, Special Events, and Dramatic Programming will be featured. May be taken twice with P.O.I. Prerequisite: Com 347-348.

*Journalism***Com 231 BASIC REPORTING & NEWSWRITING 2-2-3**

An introductory study of news media and values, with emphasis on effective reporting through the analysis of writing and news stories. BEd 111 or a knowledge of typing is desired.

(Please consult each semester's class schedule for additional course offerings in journalism in the Com 370 series.)

(c) Courses applicable to the General Education core requirements.

*Speech***Com 105 BASIC SPEECH 3-0-3**

Beginning course to develop poise and confidence in speaking, emphasizing speaker's personality, voice, diction, bodily action; fundamentals of speech preparation.

Com 200 GENERAL SEMANTICS 3-0-3

A course to develop an understanding and awareness of the inter-relationship between ideas, language and behavior.

Com 206 PERSUASION 2-2-3

Audience analysis and motivation: choice, arrangement, adaptation of materials. Talks to overcome prejudice, intensify belief, secure action. Social psychology as applied to persuasion. Prerequisite: Com 105 or P.O.I.

Com 300 DISCUSSION AND GROUP DYNAMICS 3-0-3

The study of small groups employing communication, conformity, roles, norms, leadership, and problem solving. Emphasis is placed upon applying group dynamics to everyday life.

Com 306 ARGUMENTATION AND DEBATE 2-2-3

Theory and practise in analysis, investigation, evidence, reasoning, brief making, refutation, argumentation and debating procedures. Prerequisite: Com 105 or P.O.I.

*Theatre***Com 151 INVITATION TO THE THEATRE 2-2-3 (c)**

Theatre as a social experience, its people, its genre, and its current role in our society. Trips to area productions, paid for by students, will be an essential part of the course.

Com 167 ORAL INTERPRETATION 3-0-3

Theory and practise of communicating prose and poetry to the listener through vocal and bodily techniques, tone, point-of-view, rhythm, and pace.

Com 252 THEATRE HISTORY 3-0-3 (c)

A course dealing with the plays, playwrights, actors, and designers of the theatre with emphasis on the development of Western and American theatre.

Com 257 STAGECRAFT AND LIGHTING 2-2-3 (c)

A course in the techniques and theories used to stage and light a theatre production. Set construction and current lighting effects will be studied.

Com 268 BASIC ACTING 2-2-3 (c)

Theory and practise of the current acting methods. Students will be expected to participate in a number of class projects involving the memorization of parts. Majors should have taken Com 167.

Com 350-359 STUDIES IN THEATRE PRODUCTION 2-2-3 (c)

Includes such courses as Dramatic Production, Directing, Scene Design & Lighting, and Acting II. Courses will be taught on the basis of student demand and faculty interest. Prerequisite: P.O.I.

*General***Com 370-379 SPECIAL PROBLEMS/SEMINARS IN COMMUNICATION ARTS variable credit**

A course designed to allow the student to pursue topics of special relevance.

Com 470-479 PRACTICUM AND INTERNSHIP variable credit

Instruction on an individual basis for credit from Communication Arts faculty or other qualified professionals in the student's chosen field; i.e., speech, theatre, broadcasting, journalism, or film. Prerequisite: Permission of Department Chairman

Com 480-489 INDEPENDENT STUDY IN COMMUNICATION ARTS variable credit

Designed to give a student the opportunity to work in an area of major interest under the guidance of members of the Communication Arts faculty. Prerequisite: P.O.I.

(c) Courses applicable to the General Education core requirements.



DEPARTMENT OF EDUCATION

BACHELOR OF SCIENCE

The department offers three major certification programs: Early Childhood (N-3), Elementary (K-6), Secondary (7-12). The programs project the student deeply into the liberal arts rather than withholding him from them. The programs seek to bring the student to a high level of professional competence by bringing together in a creative way the student, the school, and the content to be learned. A heavy emphasis is placed on supervised field experiences which are complementary to on-campus courses in education.

Admission to Teacher Education Program

Each applicant who is planning to teach must declare his intention to the Department of Education not later than the completion of Education 205 or 215, Foundations of Education, by filing the written application for admission to the Teacher Education Program and meeting the qualifications of the Department of Education. The criteria formulated by the Department of Education are listed below. Applicants who do not meet the criteria, or who fail to maintain the required progress levels, are counseled out of the teacher education program and directed into other areas of endeavor. The criteria are as follows:

1. Approval of the major department for prospective secondary school candidates
2. English and speech proficiency
3. Good physical and mental health
4. Scholarship: a grade point average of 2.0 or better
5. Personal qualifications: Approval from the Office of Student Affairs and recommendation of members of the Department of Education.

Progress Toward Program Completion

1. Admission to the Teacher Education Program is not automatic because of application and completion of Education 205 or Education 215. Each applicant is individually evaluated and must possess a q.p.a. of 2.0 or above to be eligible for subsequent courses. The student may be counseled out of the program at any time if, in the opinion

of the Department of Education, he is not making adequate and acceptable progress.

2. Admission to the Teacher Education Program does not imply that the student will be guaranteed completion of the program and certification. The student is evaluated at the conclusion of each semester after admission to the Teacher Education Program and may be advised to withdraw from the program at any time if the Department of Education determines that it is in the best interests of the College, the program, and the student.
3. A student will not be recommended for certification if he has any grade below "C" in the teaching major after completion of the 100 level courses.
4. Certification should be applied for during the semester of graduation. Certification after graduation will necessitate fulfilling requirements at the time of application for certification.

CERTIFICATION PROGRAM REQUIREMENTS

The Secondary Certification Program

- A. General Education as projected by the College.
- B. Academic major as outlined by each program area which supports a certification program. (Business Education, Communication Arts, English, Language, Mathematics, Science, Social Studies)
- C. Professional Education sequence as follows: Ed 215, Ed 225D, Ed 225E, Ed 305, Ed 472

The Elementary Education Major

Requirements for a B.S. in Elementary Education are the following:

- A. General Education as projected by the College.
- B. Professional Education courses as follows: Ed 205, Ed 225 (A-C), Ed 235, Ed 325, Ed 335, Ed 355, Ed 365, Ed 471, Ed 498 (6 credits), Ma 211-212, Psy 225, PE 285, Mu 325 and 326.

The Early Childhood Education Major

Early childhood education encompasses the total growth and development of the child from birth through eight years of age. The Early Childhood Education major is designed to prepare 1.) classroom teachers for nursery school, kindergarten and grades one, two, or three in both public and private schools, and 2.) teachers in Day Care Centers, Child Welfare Centers, Child Development Centers, Head Start, Follow Through, and other child care centers. The program leads to a nursery-kindergarten-primary (N-K-3) teaching certificate.

The requirements for a B.S. degree in Early Childhood Education are as follows:

- A. General Education Program as projected by the College. Psy 225 must be selected as part of the social science requirement and Psy 205 is strongly recommended.
- B. Professional Education sequence as follows: Ed 205, Ed 225 (A-C), Ed 235, Ed 315, Ed 320, Ed 325, Ed 335, Ed 355, Ed 365, Ed 471, Ed 498 (6 credits), Ma 211-212, Psy 225, PE 285, Mu 325 and 326.

COURSE OFFERINGS

Ed 205 FOUNDATIONS OF EDUCATION 3-2-4

This course involves the student in a study of some of the historical, philosophical, sociological, and psychological foundations of education. Prerequisite: Psy 105

Ed 215 INTRODUCTION TO SECONDARY EDUCATION 3-3-4

This course introduces the students to both problems and theory of secondary education with an emphasis upon the development of teaching skills and an involvement in public school education through inschool observations. Co-req. Ed 225D Prerequisite: Psy 105

NOTE: Admission to the Teacher Education Program is a prerequisite to any other Education course.

Ed 225 (A-E) EDUCATION PRACTICUM Variable Credit

This course provides preschool, elementary, or secondary classroom experience. In addition the course includes instruction in

media. Classroom experience and on-campus study is integrated in the practicum and co-requisite courses.

Ed 235 FUNDAMENTALS OF READING INSTRUCTION 2-3-3

This introductory course focuses on systematic assessment and teaching of basic reading skills: word recognition, word analysis, and comprehension skills. Co-req. Ed 225B

Ed 305 PRACTICUM IN SECONDARY EDUCATION 3-4-4

This course provides study in two specific areas: the instructional methodology of an academic discipline and in-school experience. The methodology and the classroom experience is integrated under the guidance of a clinical professor representing the academic major. Co-req. Ed 225E

Social Studies (fall), Mathematics (Offered alternate years—fall, 1977), Modern Language (Offered alternate years—fall, 1977), Science (Offered alternate years—fall, 1978), English and Communication Arts (fall), Business education (spring)

Ed 315 EARLY CHILDHOOD EDUCATION 3-3-4 (Fall)

A study of preschool through Grade 3 programs emphasizing the setting, the child, and the special needs and approaches of early childhood education. On-campus study will be coordinated with observation/participation experience in early childhood settings. Prerequisite: Psy 225

Ed 320 SPECIAL METHODS IN EARLY CHILDHOOD EDUCATION 4-0-4 (spring)

This course is designed to integrate early childhood materials and methods into the framework of the pre-operational child. Corequisite to Ed. 325, 335, 355, 365.

****Ed 325 SCIENCE FOR THE PRESCHOOL, 3-0-3, AND ELEMENTARY CHILD, 4-0-4**

A study of the concepts, procedures, and materials of science for the preschool and elementary child.

**Corequisite courses

****Ed 335 MATHEMATICS FOR THE PRESCHOOL, 3-0-3,
AND ELEMENTARY CHILD, 4-0-4**

A study of the concepts, procedures, and materials of mathematics for the preschool and elementary child.

****Ed 355 LANGUAGE ARTS AND READING FOR THE
PRESCHOOL, 3-0-3, AND ELEMENTARY
CHILD, 4-0-4**

A study of the concepts, procedures, and materials in the language arts and reading for the preschool and elementary child.

****Ed 365 SOCIAL STUDIES FOR THE PRESCHOOL,
3-0-3, AND ELEMENTARY CHILD, 4-0-4**

A study of the concepts, procedures, and materials of social studies for the preschool and elementary child.

**Ed 371-380 SPECIAL PROBLEMS IN EDUCATION
Variable Credit**

These courses involve topics chosen in response to student and faculty interests. Prerequisite: P.O.I.

**Ed 471 PROFESSIONAL INTERNSHIP, PRESCHOOL AND
ELEMENTARY 16 s.h.**

Student teaching in a preschool and/or elementary classroom.

**Ed 472 PROFESSIONAL INTERNSHIP, SECONDARY
16 s.h.**

Student teaching in a secondary classroom. A weekly seminar is a part of the professional semester.

Ed 480-489 INDEPENDENT STUDY Variable Credit

Upon the initiative of the student a program will be organized with a faculty member to study a topic of mutual interest.

Ed 498 SPECIAL TOPICS Variable Credit

Courses designed to give students an opportunity to pursue work in an area of major interest. Possible topics to be covered in the work of the courses could include Art in the Elementary School, Simulation in Education, Computers in Education, Children's Literature, Developmental Reading.



DEPARTMENT OF ENGLISH

BACHELOR OF ARTS

The Department of English educates students in the effective use of the English language and contributes to their appreciation and understanding of the cultural heritage of their literature. Accordingly, proficiency in language-skills (reading, writing, and speaking) and achievement in literary studies are the fundamental aims of the program.

Students preparing to teach English on the secondary level, to pursue graduate studies, or to enter professional or other vocational fields which recognize the value of sensitivity of language and expression, receive a thorough and comprehensive knowledge of and experience in the discipline.

ENGLISH MAJOR

A. B. with Major in English

English majors will be required to take the following:

1. En 105
2. two semesters of American Literature
3. both semesters of Literary History of Britain (Survey)
4. Literary Criticism
5. one course from the category of Literary Forms (all English courses with middle digit 1)
6. two courses from the category of Literary Movements (all English courses with middle digit 2)
7. one course from the category of Individual Authors (all English courses with middle digit 3)
8. an additional twelve hours of electives in English

Secondary Certification

In addition to requirements for the English major, students preparing to teach English on the secondary level are required to take the following courses for certification: Psy 105, Ed 215 and co-requisite Ed 225d, Ed 305 and co-requisite Ed 225e, Eng 344, and Ed 472.

COURSE OFFERINGS

Key to Course Numbering:

First number: General course level

Second number: Classification

Third number: Semester the course is offered

(Even number—spring; Odd number—fall)

GS 021 WRITING 3-0-2

A study of the basic skills of writing—grammar, usage, mechanics—prerequisite to college-level writing and literature courses.

En 100 EXPOSITORY WRITING 3-0-3 (Offered every semester)

(Not applicable for elective credit in English for majors.)

A course in the principles of writing compositions in expository and persuasive discourse; a requirement for students not passing the proficiency examination and an elective for others.

En 105 INTRODUCTION TO LITERATURE 3-0-3 (c)

Normally prerequisite to all literature courses. A study of the short story, novel, drama and verse, intended to develop the student's ability to analyze, evaluate, and appreciate literature.

STUDIES IN LITERARY FORMS

Intensive exploration of the nature and evolution of a selected literary form, e.g., the poem, the novel, the play.

***En 213 ANALYSIS OF POEMS 3-0-3 (c)**

Intensive training in reading the individual poem accurately and sensitively. Alternate years, fall

(c) Courses applicable to the General Education core requirements.

**En 312 THE RISE AND DEVELOPMENT OF ENGLISH
DRAMA TO 1900 3-0-3 (c)**

Representative English plays which still hold the stage, exclusive of Shakespeare, from the Medieval period to the 20th century with emphasis on the Elizabethan and Jacobean periods. Alternate years, spring 1978

En 313 MODERN DRAMA 3-0-3 (c)

A study of drama from the realism of Ibsen through naturalism, expressionism, and symbolism to the current "avant garde" theatre. fall

**En 314 THE RISE AND DEVELOPMENT OF THE ENGLISH
NOVEL 3-0-3 (c)**

A study of selected masterpieces from Defoe to Hardy as works of prose art and as turning points in the development of the form. Alternate years, spring 1979

En 317 CONTEMPORARY NOVEL 3-0-3 (c)

A study of the work of major novelists of the 20th century with emphasis upon the development of the novel as an art form. fall

En 318 CONTEMPORARY POETRY 3-0-3 (c)

A study of at least three major 20th century poets as well as selections from writers who have published within the last twenty years. spring

**STUDIES IN LITERARY MOVEMENTS AND
ATTITUDES**

Study of a group of literary works representative of a particular movement, point of view, or attitude; a body of material in which there are important similarities in emotional, aesthetic, or intellectual content.

En 320 CONCEPTS OF THE RENAISSANCE 3-0-3 (c)

A study of the "ruling ideas" of the Renaissance in Britain. Representative non-dramatic writers with emphasis on Spenser. Alternate years, spring 1979

En 322 THE SEVENTEENTH CENTURY 3-0-3 (c)

A study of the Metaphysical Poets and other major writers of the period, excluding Milton. Alternate years, spring, 1978

**En 323 THE RESTORATION AND EIGHTEENTH
CENTURY 3-0-3 (c)**

The poetry and prose of the Restoration and 18th century with emphasis on Dryden, Swift, Pope, Johnson, and Blake, excluding the novel and drama. Alternate years, fall 1978

En 327 THE ROMANTIC MOVEMENT 3-0-3 (c)

A study of selected writings which most significantly embody the central concepts and achievements of English Romanticism. fall

En 328 THE VICTORIAN PERIOD 3-0-3 (c)

A study of Victorian poetry and prose from Tennyson to Hardy with special emphasis on the response of the writer to the conflict, controversy, and the industrialization of the age. Alternate years, spring 1979

STUDIES IN INDIVIDUAL AUTHORS

Consideration of a significant and coherent portion of the work of a single author.

En 331 CHAUCER 3-0-3 (c)

Alternate years, fall 1978

En 332 SHAKESPEARE 3-0-3 (c)

Spring

En 333 MILTON 3-0-3 (c)

Alternate years, fall 1977

En 337 EIGHTEENTH CENTURY AUTHOR 3-0-3 (c)

Writers such as Pope, Swift, Fielding, and Goldsmith. Alternate years, fall 1979

(c) Courses applicable to the General Education core requirements.

En 338 NINETEENTH CENTURY AUTHOR 3-0-3 (c)

Writers such as Dickens and Hardy. Alternate years, spring 1979

STUDIES IN A NATIONAL LITERARY TRADITION

Consideration of a significant portion of the tradition of the literature of one nation.

En 241-242 LITERARY HISTORY OF BRITAIN I & II

Emphasis on the development of the literature of Britain, the rise of the literary forms and movements, and the influence of major writers. Majors or P.O.I.

(The following three courses in American Literature are given in sequence. The last digit does not indicate the semester in which it is offered.)

En 340 THE AMERICAN ROMANTIC MOVEMENT 3-0-3 (c)

Emphasis on an analysis of representative works by Hawthorne, Poe, Melville, Emerson, Thoreau, and Whitman.

En 341 THE RISE OF REALISM IN AMERICAN LITERATURE 3-0-3 (c)

Emphasis on analysis of representative works by Dickinson, Clemens, James, Crane, Robinson, Frost, Dreiser, Cather, Anderson, and Fitzgerald.

En 342 EXPERIMENTALISM IN AMERICAN LITERATURE 3-0-3 (c)

Emphasis on an analysis of representative works by Hemingway, Pound, Eliot, Cummings, Faulkner, Williams, Stevens, Jeffers, Hart Crane, Moore, Welty, Bellow and Nabokov.

STUDIES IN PROBLEMS IN LITERATURE**En 352 FANTASY IN LITERATURE 3-0-3 (c)**

A study of major works of fantasy (*Alice in Wonderland*, *The Hobbit*, *The Little Prince*, and others) focusing on the thematic significance of "the journey." Alternate years, spring 1978

(c) Courses applicable to the General Education core requirements.

En 357 WOMEN AND LITERATURE 3-0-3 (c)

A course which seeks to explore the effects on women writers and readers of a male dominated literary tradition. Alternate years, fall 1978

STUDIES IN BACKGROUNDS OF LITERATURE

A study of the effect of a significant event or a related series of events or works upon subsequent literature.

En 369 CLASSICAL BACKGROUNDS OF LITERATURE 3-0-3

The study of classical mythology and literature as meaningful allusions, symbols, and archetypes is traced in representative works of English and American literature. Alternate years, fall 1977

STUDIES IN THE TEACHING OF ENGLISH

Study of the methods and materials related to the teaching of English at the secondary school level.

Ed 305 METHODS SEMINAR IN LITERATURE AND COMMUNICATION ARTS

The inductive teaching of literature and communication combined with in-school observation and simulated teaching periods, assistance in the Reading and Writing Labs, and help in Campus Theatre. Co-requisite with Ed 225E prior to professional semester. (Ed 305—four credits; Ed 225E—one credit) fall

En 344 METHODS SEMINAR IN LANGUAGE AND COMPOSITION

The inductive teaching of language, the various grammars, and their utilization in teaching composition at the secondary level and the Writing Lab. Prerequisite to professional semester. spring

STUDIES IN LANGUAGE AND COMPOSITION

Study different aspects of language and composition.

**En 384 ADVANCED COMPOSITION 3-0-3**

A course in the principles of non-fiction prose writing for students who wish to improve their skills. Research methods, critical analysis, and practice in writing are stressed. Alternate years, spring 1978 P.O.I.

En 381 CREATIVE WRITING (POETRY) 3-0-3

A course for the writing of original verse and an understanding of the craftsmanship involved. Graded Pass, No-Pass; P.O.I. Alternate years, fall 1977

En 382 CREATIVE WRITING (PROSE) 3-0-3

A course to instruct the student in the production of original works of prose and to acquaint him with literary terminology. Graded Pass, No-Pass; P.O.I. Alternate years, spring 1979

En 394 LITERARY CRITICISM 3-0-3

Studies in the methods of literary criticism, the aim of which is to enable students to develop for themselves a sound approach to literature. spring

***En 396 GREAT BOOKS**

Wide reading and discussion of the ideas of some of the classics of Western literature from the Greeks to Hesse. Prerequisite: P.O.I. Alternate years, spring 1978

En 481-490 INDEPENDENT STUDIES IN ENGLISH (2-3 credits)

This course is designed to give the individual student the opportunity to pursue work in an area of major interest under the guidance of a member of the English Department.

En 371-380 SPECIAL PROBLEMS

These courses involve specific subjects chosen as a response to student faculty interest.

*Asterisk indicates course will be offered contingent upon sufficient staff and enrollment.

DEPARTMENT OF HISTORY

BACHELOR OF ARTS

The study of history encourages the student to assess the relationships between facts and ideas, and also to orient himself intelligently in time. The departmental program is designed to prepare students for further study in graduate programs or for careers in teaching, government service, business, and law.

Requirements in History

The history major requires the student to satisfactorily complete 39 hours of work in history, including Hi 105 (or its equivalent) and Hi 390. One is required to select nine hours in United States history; nine hours in European history, and six hours in non-U.S., non-European courses.

History is one of the major areas in the social science major preparing a student for certification to teach in secondary schools. All students wishing to teach social studies must have at least 12 hours in history regardless of their major area, including Western Civilization (Hi 105) and United States History (Hi 201-202). Twenty four hours of history is required if history is chosen as the major area in the social sciences. The hours must include the following: Hi 105, Hi 201, Hi 202, Hi 390, one European history beyond Hi 105, and one course in non-United States and non-European History. Six hours are elective.

It is also possible for the student to acquire a B.A. in History as a history major and receive certification in the social studies. For further explanation, contact a member of the History Department.

When history is selected as one of the major areas for the social science major which does not prepare for a teaching career, the following are required:

For the 24-hour major, take the same sequence suggested above for those wishing to teach Social Studies; for the 15-hour minor, take Hi 105, Hi 201, Hi 202, and six hours of electives in history.

Area of Concentration

For the elementary education concentration the department requires satisfactory completion of 24 hours, including Hi 105 or its

equivalent. Students must complete nine hours of United States history, including Hi 201-202; three hours of European history beyond Hi 105; and three hours in a non-U.S., non-European area. The other six are history electives.

Exceptions to the above requirements must have the approval of the History Department.

Combinations which allow the student a major and training for other careers are possible. For example, one may major in history and also complete the basic core program in Business, Communication Arts, or Political Science. Consult the department for other program areas.

COURSE OFFERINGS

Hi 105 TOPICS IN THE HISTORY OF WESTERN CIVILIZATION 3-0-3 (c)

A highly selective approach to the long-range developments and to the major problems of our Western heritage.

Hi 201-202 HISTORY OF THE UNITED STATES 3-0-3 Each (c)

An incisive analysis of the economic, political, diplomatic, social, and intellectual currents that have molded the American experience. The two-semester course is divided at 1877.

Hi 205 MODERN FAR EAST 3-0-3 (c)

A general survey of China, Japan, Korea, and Southeast Asia from about 1800 to the present with special emphasis on East-West relations.

Hi 211 GREEK AND ROMAN HISTORY 3-0-3 (c)

Athens in the classical age from Solon to Alexander; Rome during the Republic, the Augustan Age and the early Empire (Alternate Years; Fall, 1978).

(c) Courses applicable to the General Education core requirements.

Hi212 MEDIEVAL HISTORY 3-0-3 (c)

Emphasis on the eleventh and twelfth centuries including such topics as the Gregorian Revolution in the Church, the Anglo-Norman monarchy, law, society, and the growth of universities (Alternate Years; Spring, 1979).

Hi213 RENAISSANCE AND REFORMATION 3-0-3 (c)

Politics, society, and humanism in Renaissance Italy, particularly in Florence; The new monarchs, the northern humanists, and the Protestant Reformation of the sixteenth century.

Hi214 ABSOLUTE MONARCHY: 1600-1800 3-0-3 (c)

Political, social, and religious problems of Divine-Right monarchs and the struggles for power in the seventeenth and eighteenth centuries. The emphasis will be on Stuart England and Bourbon France.

Hi215-216 ENGLISH HISTORY 3-0-3 Each (c)

A consideration of the entire span of English History from earliest times to the present. Special attention is given to monarchy, society, economy, religion, and parliamentary development.

Hi306 RECENT HISTORY OF THE UNITED STATES 3-0-3 (c)

An intensive analysis of the vexing economic, political, social, and diplomatic forces responsible for shaping the American experience since 1900: conflicting interpretations emphasized.

Hi313-314 HISTORY OF RUSSIA: TSARIST AND SOVIET 3-0-3 Each (c)

The development of Russia from its medieval origins to the Revolution, with emphasis placed on the development of Tsarist institutions and society; the second term considers the Russian Revolution and the building of the new society, with emphasis on the Soviet Union's position in the modern world.

Hi317 REVOLUTION, NATIONALISM AND DEMOCRACY 3-0-3 (c)

Nineteenth Century Europe from the Vienna Congress to World War I, with particular emphasis on the conservative reaction to the French Revolution, the movement towards democracy, and surging nationalism.

Hi318 THE AGE OF ANXIETY 3-0-3 (c)

An examination of Twentieth Century Europe, surveying both World Wars and their effect on modern society. The focus is on the rise of totalitarian ideologies, the plight of democracy, and the depression.

Hi323 HISTORY OF CHINA 3-0-3 (c)

A survey of Chinese history and culture with emphasis on the modern period and the meeting of China and the West.

Hi324 HISTORY OF JAPAN 3-0-3 (c)

A survey of Japanese history and culture from the beginning to modern times including Japan's response to the western impact.

Hi327 HISTORY OF AFRICA 3-0-3 (c)

A survey of African history, including the growth of African empires, the impact of Islam, the age of imperialism and colonialism, and the emergence of nationalism.

Hi328 MODERN AFRICA 3-0-3 (c)

Africa in the nineteenth and twentieth centuries, with emphasis on the age of imperialism and colonialism, as well as on African Nationalism leading to Independence.

Hi329 HISTORY OF LATIN AMERICA 3-0-3 (c)

Latin American development since Independence, with stress placed on contemporary political and economic developments as they relate to United States policy.

Hi330-339 STUDIES IN UNITED STATES HISTORY 3-0-3 Each (c)

An analytical inquiry into special topics and periods: Economic History, Urban History, Colonial America, The American Revolution, The Middle Period, The Age of Industrialism, Technology and Society, etc.

Hi340-349 MINORITIES IN UNITED STATES HISTORY 3-0-3 Each (c)

An incisive view of minorities in a society venerating majoritarian rule: Afro-American History, Minorities in America, Southern History, Indian History, Women in History, etc.

(c) Courses applicable to the General Education core requirements.

Hi 370-379 SPECIAL PROBLEMS 3-0-3 Each (c)

This consists of special subjects chosen as a response to student and faculty interest. Repeatable for credit.

Hi 390 HISTORICAL METHODS AND HISTORIOGRAPHY 3-0-3 (c)

Thorough examination of the development of the historical discipline, tools employed by the researcher, concluding with a study of the historians themselves. Required of junior majors and history concentrators.

(c) Courses applicable to the General Education core requirements.

**Hi 403 A HISTORY OF UNITED STATES FOREIGN RELATIONS 3-0-3 (c)**

A study of the major personalities, events, and trends in United States foreign policy with an emphasis on the influence exerted by domestic considerations.

Hi 406 SOCIAL AND INTELLECTUAL HISTORY OF THE UNITED STATES 3-0-3 (c)

An examination of the major social and intellectual movements in the United States from colonial times to present with an emphasis on reform and reformers.

Hi 480-489 INDEPENDENT STUDY Variable Credit (c)

Designed to offer an opportunity to make use of techniques of historical interpretation in specific problem areas. Approval of the Dean of the Faculty is necessary. P.O.I.

Hi 498-499 HISTORY SEMINAR 3-0-3 Each (c)

A special course designed primarily for (but not limited to) senior majors in the department. Research is an integral part of the learning experience.

Ed 305 PRACTICUM IN SECONDARY EDUCATION: SOCIAL STUDIES 3-3-4

Fall Term only. (See Education)

*Geography Offerings***Geo 105 WORLD GEOGRAPHY 3-0-3**

A regional and topical geography concentrating upon the Old World, including an introduction to political geography, and emphasizing human rather than physical geography.

Geo 205 GEOGRAPHY OF THE UNITED STATES AND PENNSYLVANIA 3-0-3

A regional geography of the United States, emphasizing the inter-relationships between geography and economics, politics, and culture. Pennsylvania will be examined as one of several case studies.

DEPARTMENT OF MATHEMATICS

BACHELOR OF SCIENCE

COURSE OFFERINGS

The program in mathematics is designed to prepare the mathematics major for graduate study, secondary school teaching, or industry and government employment; to offer students in the sciences the mathematical background for their fields; and to give other students experience with mathematical reasoning and methods. Instruction is designed to aid in the development of self reliance, initiative, and confidence as well as to provide mathematical information.

B. S. with Major in Mathematics

- Mathematics: Minimum of 36 hours distributed as follows: Ma 121, 122, 201, 222, 421 and completion of one of the following options.
- Option 1-Ma 301, 302, 422, 441 and six hours from other 300 or 400 mathematics courses. Students contemplating graduate work should plan to complete option 1.
 - Option 2-Ma 301, 341, 351, either 302 or 422 and six hours from other 300 or 400 mathematics courses. This option is required for Secondary Education Certification.
 - Option 3-Ma 351, 352, 321, 362, 422 and three hours from other 300 or 400 mathematics courses. This option is intended for students contemplating employment in industry or government upon graduation.

Computer Science: CS 125

- Modern Language or Computer Skills: Six hours in one modern language or six hours of computer science courses in addition to CS 125
- Area of Concentration: An area of concentration in mathematics is available for Elementary Education majors who choose that option in the Elementary Education program. Required courses are Ma 121, 122, 211, 201, 151, 341, (Ma 212 is not required.)

GS 011 INTERMEDIATE ALGEBRA 3-0-2

A study of the fundamental arithmetic and algebraic skills prerequisite to college-level mathematics and science courses.

Ma 101 PRECALCULUS MATHEMATICS 4-0-4 (c)

Precalculus study of the function concept and of particular classes of functions: polynomials, rational functions, algebraic functions, logarithms, general powers, exponential and trigonometric functions. Normally, this course is taken only by students planning to take Ma 121 and not prepared to do so. Prerequisite: GS 011 (Competency)

Ma 117-118 CONCEPTS OF CALCULUS I & II 4-0-4 Each (c)

A presentation of the basic concepts and techniques of differential and integral calculus. The functions and their applications studied are limited to those most likely to occur in such areas as business, economics, the life and social sciences; namely, the algebraic, exponential, and logarithmic. Prerequisite: GS 011 (Competency)

Ma 121-122 CALCULUS I & II 4-0-4 Each (c)

Differential and integral calculus of the elementary functions with associated analytic geometry. This sequence is intended primarily for majors in mathematics or the physical sciences. This is not intended to exclude interested and capable students from other areas. Prerequisite: Ma 101 (Competency)

Ma 151 PROBABILITY AND STATISTICS 3-0-3 (c)

A study of the basic principles of probability, frequency distribution, measures of location and dispersion, sample and population relationships, estimation, and hypothesis testing. Prerequisite: GS 011 (Competency)

(c) Courses applicable to the General Education core requirements.

Ma 201 LINEAR ALGEBRA 3-0-3 (c)

An introduction to linear algebra including matrices, determinants, applications to systems of linear equations, and linear transformations. Prerequisite: Ma 121

Ma 211-212 CONCEPTS IN MODERN MATHEMATICS I & II 3-0-3 Each (c)

A course designed primarily to provide mathematical training for prospective elementary school teachers. Explains the mathematics behind the content of modern elementary school mathematics programs. Includes mathematical reasoning, sets and relations, structure of number systems, algorithms, number theory, geometry and other topics.

Ma 222 CALCULUS III 4-0-4 (c)

A continuation of Ma 122. The completion of the basic topics of the calculus sequence including an introduction to differential equations and calculus of several variables. Prerequisite: Ma 122

Ma 301-302 ABSTRACT ALGEBRA I & II 3-0-3 Each (c)

A study of fundamental set theory, relations, mappings, groups, construction of number systems, integral domains, divisibility, congruences, modular arithmetics, fields, polynomials over integral domains and over fields, vector spaces, linear transformations. Prerequisite: Ma 201

Ma 321-322 APPLIED MATHEMATICS I & II 3-0-3 Each (c)

A study of selected topics relevant to problems arising in engineering and the physical sciences. Included are standard methods for solving ordinary differential equations and boundary value problems, power series solutions of differential equations, the Laplace transformation, vector analysis and matrices, line and surface integrals, Fourier series, partial differential equations, and complex variables. Prerequisite: Ma 222 (Ma 321 fall) (Ma 322, Offered Alternate Years: spring 1979)

Ma 341 MODERN GEOMETRY 3-0-3 (c)

Euclidean and non-Euclidean geometry from a modern viewpoint, acquainting the student with the development of geometric thinking during the past twenty centuries and with recent discoveries. (Offered Alternate Years, fall 1978)

Ma 351-352 MATHEMATICAL STATISTICS I & II 3-0-3 Each (c)

The first semester is a study of probability and distribution theory including the uniform, geometric, binomial, hypergeometric, negative binomial, multinomial, Poisson, exponential, Gamma, chi square, Student's t, Snedecor's F, and normal distributions. The second semester is a study of principles of statistical inference with an emphasis on estimation and hypothesis testing. Prerequisite: Ma 222

Ma 362 NUMERICAL ANALYSIS 3-0-3 (c)

Iterative methods of solving equations, numerical methods of linear algebra, interpolation with polynomials, numerical differentiation and integration, along with numerical solutions of ordinary differential equations. Prerequisites: Ma 201, Ma 222, CS 125

Ma 370-379 SPECIAL TOPICS IN MATHEMATICS Variable Credit (c)

Prerequisite Permission of the Department of Mathematics. Directed study in topics of special interest to advanced undergraduate mathematics students.

Ma 421-422 REAL ANALYSIS I & II 3-0-3 Each (c)

Introduction to modern abstract theory of calculus. Careful analysis of the concepts and properties of point sets, sequence limits, continuity, derivative, integration, sequences of function functions of several variables. Prerequisite: Ma 201, Ma 222

Ma 441 TOPOLOGY 3-0-3 (c)

Introduction to general point set topology. Includes compactness, connectedness, and the separation axioms. Prerequisite Ma 201, Ma 222 (Offered Alternate Years, fall 1978)

Ma 480-489 INDEPENDENT STUDY Variable Credit (c)**Ed 305 PRACTICUM IN SECONDARY EDUCATION MATHEMATICS 6-3-6**

(See Education)
(Offered Alternate Years: fall 1977)

(c) Courses applicable to the General Education core requirements.

DEPARTMENT OF MODERN LANGUAGES

BACHELOR OF ARTS

The Department of Modern Languages serves: 1) B.A. candidates with a major in languages, 2) students preparing for a teaching career in languages, 3) students whose degree programs require studies in languages, 4) students studying language to broaden their cultural background. The courses in languages and related subjects are designed to provide training in the language, literature, and civilization, whereby the student may gain an understanding and appreciation of the life and thought of the people.

B. A. with Major in Modern Language

The Department of Modern Languages offers instruction in French, German, Spanish, Italian, Russian, and Esperanto with majors in French, German, and Spanish. A major in the department may be met by one of the following: 30 credit hours in one language above 201-202 level; or 18 credit hours of a first language above 201-202 and 12 credit hours of a second language above 101-102. If Russian or Italian is taken as a second language, the 12 hours will include the elementary course. Language majors and students who have completed 202 or above are encouraged to participate in the Brethren Colleges Abroad program.

Departmental majors must include the following courses: 302, 331, 321 (in the major language). A minimum of 15 hours above 201-202 must be taken in residence at Elizabethtown College. Students planning certification must complete 302 in each language.

Intermediate Proficiency by Examination

Upon successful completion of the Modern Language Association Cooperative Foreign Language test, a student may be exempted from the language requirement. This examination is administered during Freshman Orientation Week free of charge. It may be taken at any other time during the college year for the general college fee of \$20.00; however, this examination may be taken only once in any one language. All students interested in studying languages in the department must take this examination or be placed in the course that he needs. NOTE: ANY STUDENT WISHING ADVANCED PLACEMENT MUST PASS THIS EXAMINATION.

Area of Concentration Option

Elementary education majors who elect modern languages for their area of concentration may take 18 hours including 101-102. Two languages may be used toward the concentration option provided that 301-302 is completed in one language.

Experimental Harrisburg Consortium 1977-78

The department has begun a cooperative program for the teaching of upper division language courses at the University Center, Harrisburg. The participating colleges along with Elizabethtown College are Lebanon Valley College and Messiah College. This program allows students to take advantage of the faculties of other institutions and to take courses unavailable on our own campus. Transportation costs to and from the Center are provided for students and faculty.

COURSE OFFERINGS

Fr, Ge, Sp, Ru*, It*, Esp* 101-102 3-1-3 each

An audio-lingual approach to the study of the structure of the language. Includes pronunciation, grammar and pattern drills and readings of selections to acquaint the student with the civilization. Credit will be granted for students who have studied this same language in high school provided that the proficiency test indicates poor background and the instructor in 101-102 feels that credit should be so granted.

Fr, Ge, Sp, Ru, It, Esp 201-202 3-1-3 each (c)

Further development of the skills of reading, understanding, speaking and writing in the language. Supplementary laboratory practice. Review of fundamental grammar. Class conducted mainly in the language. Prerequisite: 102 or equivalent**

*Russian, Italian, and Esperanto offered upon sufficient student interest and availability of faculty.

(c) Courses applicable to the General Education core requirements.

**Equivalency is met by successful completion of at least two years of high school language; completing 101-102 with a passing grade; or passing successfully the MLA Cooperative Foreign Language test form LA (for one year college equivalence, administered like the MA form). (See paragraph on intermediate proficiency by examination.)

Fr, Ge, Sp 203 CONVERSATION 3-0-3 (c)

A course designed to give the student an ease in conversing in the language and an introduction to literary genre. A more advanced development of the skills of writing, reading, listening, etc. This course will be conducted in the language only. Prerequisite: 202 or placement by proficiency test.

Fr, Ge, Sp 204 INTRODUCTION TO LITERATURE 3-0-3 (c)

A continuation of 203. May be used to fulfill literature core. Prerequisite: 203 or P.O.I.

Fr, Ge, Sp 301-302 ADVANCED COMPOSITION AND CONVERSATION 3-0-3 each

A course designed to give the student opportunities and training in effective communication with some fluency. Intensive practice in speaking and writing everyday language, including a detailed study of the syntax, vocabulary building. Includes varied exercises, related translations and original compositions. Prerequisite: 202 or equivalent, or P.O.I. for 301; 204, 301 or equivalent, or P.O.I. for 302.

ALL COURSES NUMBERED ABOVE 302 HAVE A PRE-REQUISITE OF 302, ITS EQUIVALENT, OR P.O.I.
Offered only upon sufficient enrollment and staff.

Fr, Ge, Sp 321 CIVILIZATION 3-0-3

Significant facts and events of the cultural and historical evolution of Spain, France or German to the 20th century. (Alternate years spring 1978)

Fr, Ge, Sp 331 LINGUISTICS 3-0-3

A survey of linguistic methods as well as a study of phonetics; training in the improvement of pronunciation.

**ML, Fr, Ge, Sp 371-380 SPECIAL PROBLEMS
Variable Credit**

Courses designed to allow the student to pursue topics of special relevance not otherwise covered in the curriculum. Offered when student interest and faculty availability justify.

ALL 400 LEVEL COURSES IN MODERN LANGUAGES
MAY FULFILL LITERATURE CORE REQUIREMENT

**Fr, Ge, Sp 401, 402 SURVEY OF LITERATURE
3-0-3 each (c)**

A survey of the major literary trends and a study of the major authors in the light of significant developments in history and civilization.

*FRENCH***Fr 418 FRENCH LITERATURE OF THE MIDDLE AGES
AND RENAISSANCE 3-0-3 (c)**

Prerequisite: Fr 302 or P.O.I.

**Fr 421 FRENCH LITERATURE OF THE AGE OF LOUIS
XIV 3-0-3 (c)**

A survey of the Golden Age of French Literature, with special attention to Corneille, Racine, Molière, La Rochefoucauld, La Fontaine, and La Bruyère.

(c) Courses applicable to the General Education core requirements.



Fr 422 FRENCH LITERATURE OF THE AGE OF REASON 3-0-3 (c)

Readings and discussion of the "esprit philosophique" in the Age of the Enlightenment, as illustrated in the writings of Fontenelle, Montesquieu, Voltaire, Rousseau, and others.

Fr 431 FRENCH LITERATURE OF THE NINETEENTH CENTURY 3-0-3 (c)

Romanticism, Realism, and Symbolism with selections from the writings of Chateaubriand, Lamartine, Hugo, Flaubert, Baudelaire, Stendhal, Balzac, Verlaine, Rimbaud.

Fr 432 FRENCH LITERATURE OF THE TWENTIETH CENTURY 3-0-3 (c)

The more recent literary tendencies of France as exemplified in the poetry of Válerý, Apollinaire, Cocteau, Prévert; in the plays of Claudel, Giraudoux, Sartre; in the novels of Proust, Gide, Mauriac, Saint-Exupéry, Camus.

GERMAN

Ge 411-412 GERMAN CLASSICISM AND ROMANTICISM 3-0-3 each (c)

Reading of representative works of the period, with emphasis on authors such as Lessing, Goethe, Schiller and Heine.

Ge 413-414 GERMAN DRAMA OF THE NINETEENTH AND TWENTIETH CENTURY 3-0-3 each (c)

A close examination of the dramas of Buechner, Grillparzer, Hebbel, Hauptmann, Brecht, Dürrenmatt, Frisch, and others.

Ge 417-418 GERMAN LITERATURE SINCE GOETHE 3-0-3 each (c)

Reading and discussion of the works by German Realists, Naturalists, Impressionists, Expressionists and contemporary authors.

Ge 422 EARLY GERMAN LITERATURE 3-0-3 (c)

A survey of German literature from its beginning to the time of Goethe, with emphasis on the medieval epic and/or Baroque drama and poetry.

(c) Courses applicable to the General Education core requirements.

SPANISH

Sp 413-414 SPANISH AMERICAN LITERATURE 3-0-3 each (c)

A survey of the major literary developments and study of the major authors of Spanish America from the conquest to the present time.

Sp 421 CERVANTES 3-0-3 (c)

A study of the man and his works; Don Quixote and its universal significance.

Sp 422 GOLDEN AGE OF DRAMA 3-0-3 (c)

A survey of Spain's outstanding dramatists—Lope de Vega, Tirso de Molina, Ruiz de Alarcon and Calderon de la Barca.

Sp 432 CONTEMPORARY SPANISH LITERATURE 3-0-3 (c)

A study of the Generation of 1898, the figures who brought about a revival in Spanish critical thinking, and a study of the major literary trends up to the generations following the Spanish Civil War.

ML 387 PSYCHOLINGUISTICS 3-0-3

An introduction to the nature of language and its relation to human thought and communication. This course concerns the child's intuitive acquisition of syntax (generative grammar) as perceived by Noam Chomsky and his followers. Topics treated include aphasia (loss of speech), dialect investigation, phonology. Prerequisite: 202 or P.O.I.

Fr, Ge, Sp 481-490 INDEPENDENT READINGS Variable credit (c)

Courses selected to fill the needs of individual seniors and to supplement their selection of courses. An opportunity for senior majors to undertake an independent project in some area of language or literature. May fulfill Literature core requirement provided the topic relates to literature in a foreign language and not to language.

ED 305 METHODS OF TEACHING FOREIGN LANGUAGE 4-0-4

An introduction to the principles of modern language teaching with emphasis upon the audio-lingual approach. See the Department of Education.

DEPARTMENT OF MUSIC

MUSIC: BACHELOR OF ARTS

MUSIC EDUCATION: BACHELOR OF SCIENCE

MUSIC THERAPY: BACHELOR OF SCIENCE

The Music Department's basic purposes are to develop students' comprehension and appreciation of music as a cultural force in the past and present, to prepare majors for professional careers as music educators and music therapists, and to offer a major within the B.A. degree for those students interested in a liberal arts education.

Required courses for the music education major are Music 101-102, 103-104, 201-202, 203-204, 231, 234, 237, 311, 312, 321-322, 343, 417, 419, 441-442, 471 or 472, a minimum of 12 hours of applied music instruction, a minimum of eight credit hours in ensemble participation, and Education 215. A minimum grade of C or above in all music courses and Education 215 is required for certification. Music education majors may elect a choral, instrumental or general emphasis, the requirements of each emphasis varying slightly from the above. Program approval status has been granted by the Pennsylvania Department of Education and the National Association of Schools of Music.

Required courses for the music therapy major are Music 101-102, 103-104, 201-202, 203-204, 231, 234, 237, 292, 293, 295, 321, 343, 393-394, 395, 417, 419, 491, 494, 495, and 499, a minimum of eight semester hours in applied music instruction and a minimum of six hours credit in ensemble. A grade of C or above in all music and music therapy courses is required. A six-month internship in an approved clinical facility is required for graduation after completion of the four year program. Tentative approval of the music therapy program has been given by the National Association for Music Therapy and the National Association of Schools of Music.

Required music courses for the B.A. degree are normally Music 101-102, 103-104, 201-202, 203-204, 321-322, 417, 419, 441-442, 12 semesters credit in applied music and three hours of ensemble credit. The music requirements of the B.A. degree are flexible, and are determined by the needs and interests of each student. Under the guidance of a departmental advisor, each B.A. music major works out a program which includes at least 40 hours of music courses.

A copy of other departmental graduation requirements for music majors, including proficiency requirements in piano and voice and recital participation and attendance, may be obtained from the Department Chairman's Office.

The Music Department has a Preparatory Division which

offers instruction to pre-college students and adults. College students desiring to take instruction without credit may also enroll in the Preparatory Division. Instruction is available from qualified college student instructors and departmental faculty. Interested persons should check with the Director of the Preparatory Division.

Prospective students desiring information about audition requirements may write to the Music Department Chairman or the Director of Admissions.

COURSE OFFERINGS

Mu 101-102 LITERATURE AND MATERIALS OF MUSIC 3-0-3 Each (c)

The fundamentals of music theory, harmony, and form with emphasis on the development of analytical and compositional skills through the study of literature of all periods. Course includes integration of Music 103-104, but separate grades are given.

Mu 103-104 FUNDAMENTALS OF SIGHT-SINGING, EAR-TRAINING, AND KEYBOARD HARMONY 0-2-1 Each

Emphasis upon the development of visual and aural music skill through the study of music literature. Course is integrated with Music 101-102.

Mu 111-112 VOICE CLASS 0-2-1 Each (c)

A basic study of the fundamentals of breath control, tone production and development of vocal technique. Open to all students.

Mu 113-114 PIANO CLASS 0-2-1 Each

The class is designed to develop basic piano skills and knowledge of music fundamentals. Daily practice is required. Class enrollment limited to twelve and offered only upon sufficient demand. Not open to music majors.

(c) Courses applicable to the General Education core requirements.

Mu 117-118 PIANO CLASS 0-2-1 Each

A class designed to develop basic piano skills. Open to music majors and other students with permission of instructor. Required of all music majors whose first applied instrument is not piano.

Mu 201-202 ADVANCED LITERATURE AND MATERIALS OF MUSIC 3-0-3 Each

Advanced harmony, form, and analysis with emphasis upon music of the Renaissance, Baroque, Classical, Romantic, and Twentieth Century. Creative projects are stressed. Course includes integration of Music 203-204, but separate grades are given.

Mu 203-204 ADVANCED SIGHT-SINGING, EAR-TRAINING, AND KEYBOARD HARMONY 0-2-1 Each

Continued emphasis upon the development of aural and visual skills. Course is integrated with Music 201-202.

Mu 215 HISTORY AND APPRECIATION OF MUSIC 3-0-3 (c)

A study of historical art periods with particular attention given to great composers and their outstanding compositions. (The primary purpose is to help students develop a standard of musical taste.) Non-credit for music majors.

Mu 231 BRASS CLASS 0-2-1

A course including the method of tone production, fingerings or positions, care and repair, and methods and materials for teaching trumpet or cornet, French horn, baritone, trombone, and tuba.

Mu 234 PERCUSSION CLASS 0-2-1

A course including the methods of tone production, care and repair, and methods and materials for teaching snare drum, cymbals, timpani, and other percussion instruments.

Mu 235 HISTORY OF JAZZ 3-0-3 (c)

A course devoted to the exploration of the chronological development of jazz as an American art form, from Blues and Ragtime to Third Stream and current styles.

(c) Courses applicable to the General Education core requirements.

Mu 237-238 ELEMENTARY AND INTERMEDIATE STRING CLASS 0-2-1 Each

Courses including the method of tone production, fingerings, care and repair, and methods and materials for teaching violin, viola, violincello, and double bass.

Mu 292 INTRODUCTION TO MUSIC THERAPY 2-1-3

A survey of music therapy through lecture-discussion sessions, reading, student reports, and field trips. An emphasis is placed on the potentials of music therapy with a variety of populations. Music Therapy Majors or P.O.I.

Mu 293 RECREATIONAL MUSIC 0-2-1

The use of recreational instruments, materials, and techniques with handicapped persons. Corequisite: Mu 311.

Mu 295 CLINICAL EXPERIENCE I-MUSIC THERAPY 0-2-1

Supervised field experience (observation and participation) in an approved clinical facility. Minimum of 30 clock hours total for each clinical experience. Music Therapy Majors only.

Mu 311 MUSIC IN THE ELEMENTARY SCHOOL 3-0-3

A thorough study of objectives, methods, and materials for elementary school music programs through singing, instrumental, rhythmic, creative and listening activities. Detailed study and use of recent school music songbook series. Observations and laboratory experience included. Open to music majors or with P.O.I.

Mu 312 MUSIC IN THE SECONDARY SCHOOL 3-0-3

Methods and materials for secondary general music classes and performance groups, with special concentration on the junior high school general music class. Further attention, especially, is given to adolescent voice problems and the successful organization and direction of choral and instrumental performing groups. Observations and laboratory experience included.

Mu 321-322 INSTRUMENTAL-CHORAL CONDUCTING AND TECHNIQUES 3-0-3 Each

A course designed to give students knowledge and facility in directing choruses, bands, and orchestras. Conducting techniques, choral

and instrumental methods and problems, score reading, and interpretation are included. Prerequisite Mu 204 or P.O.I.

Mu 325 TEACHING MUSIC IN THE ELEMENTARY SCHOOL-LAB 0-2-1

A course designed to develop the music skills for elementary education majors. The fundamentals of music theory, chording skills on piano, guitar, and autoharp, and music reading skills are included. The course may be exempted by proficiency exams.

Mu 326 TEACHING OF MUSIC IN THE ELEMENTARY SCHOOL 3-0-3

A study of the methods and materials for the elementary school teacher to use in a balanced elementary music program that includes rhythmic activities, singing, playing melody-harmony instruments and listening activities. The course covers the use of music in developing learning centers, ways of promoting individual creativity, and how music may be integrated with other aspects of childhood education. Prerequisite: Music 325

Mu 337 ADVANCED STRING CLASS 0-2-1

A continuation of Music 238 with emphasis upon development of string techniques. Prerequisite: Mu 238

Mu 343-344 WOODWIND CLASS 0-2-1 Each

A course including the methods of tone production, fingerings, care and repair, and methods and materials for teaching flute, oboe, clarinet, bassoon, and saxophone.

Mu 371-380 SPECIAL PROBLEMS Variable credit

This sequence of numbers permits the department to offer courses to any group of students who express an interest in a particular area of study not a regular part of the curriculum. Prerequisites are determined according to the nature of each specific course. Courses offered one year may or may not be offered in subsequent years.

Mu 393-394 PSYCHOLOGICAL FOUNDATIONS OF MUSIC 2-0-2 Each

A study of the psychological and physical effects of music, including the cultural relationships of man and music, the relationships of music, thought, and affect, and acoustics; research methods and

their application. Music Therapy Majors or P.O.I. May be taken out of sequence or as individual courses by non-therapy majors.

Mu 395 CLINICAL EXPERIENCE II—MUSIC THERAPY 0-2-1

Supervised field experience (observation and participation) in an approved clinical facility. Minimum of 30 clock hours total for each clinical experience. Music Therapy majors only.

***Mu 415 CLASSICAL-ROMANTIC MUSIC LITERATURE 2-0-2**

A survey of instrumental and vocal music of the Classical and Romantic periods. Prerequisite: Mu 202, or Mu 215, or P.O.I.

Mu 417 IMPRESSIONISTIC-MODERN MUSIC LITERATURE 2-0-2

A survey of music from Impressionism to the present avant-garde styles. Prerequisite or Corequisite: Mu 202; prerequisite for non-music majors: Mu 215, or P.O.I.

Mu 419 COUNTERPOINT 2-0-2

A course emphasizing contrapuntal techniques of the 16th through 20th centuries through representative composers and original compositions. Prerequisite or Corequisite: Mu 202

***Mu 440 BAND AND ORCHESTRA ARRANGING 2-0-2**

A course designed to develop the ability to compose or arrange music for concert or marching bands and orchestras. A study of instrument ranges, limitations, and uses and effects in various combinations is included. Prerequisite: Mu 202 or P.O.I.

Mu 441-442 HISTORY OF MUSIC 3-0-3 Each

A comprehensive survey of Western music from ancient to modern times. The course includes the evolution of musical forms, styles, and media through careful consideration of music literature and the relation of musical to cultural and historical development. Open to music majors or with P.O.I. Mu 442 may be taken prior to Mu 441.

*Contingent upon sufficient enrollment and availability of staff.

***Mu 451-452 PIANO METHODS AND MATERIALS**
2-1-2 Each

This course acquaints the pianist with modern methods of piano teaching of children, youth, and adults, and includes a survey of teaching materials for various stages of progress. Teaching demonstrations and experience will be a part of the course. Prerequisite: Two semesters of Mu 269. Offered alternate years: 1977-78.

Mu 471 or 472 STUDENT TEACHING IN MUSIC
8, 10, or 12

Includes teaching experience in both elementary and secondary music classes. Instrumental and vocal experiences may be arranged. Minimum prerequisites: Mu 231, Mu 234, Mu 237, Mu 311, Mu 312, Mu 321-322, Mu 343.

Mu 481-490 INDEPENDENT STUDY Variable Credit

The purpose of this class is to offer individual students opportunities for musical composition, arranging, or research under faculty supervision. P.O.I.

Mu 491 INFLUENCE OF MUSIC ON BEHAVIOR 3-0-3

Survey of experimental studies dealing with the effects of music on behavior; the intervention of music in therapy; and basic therapeutic approaches and techniques. Prerequisites: Mu 295, 393 and 394 or P.O.I.

Mu 494 MUSIC IN THERAPY 3-0-3

Therapeutic approaches and techniques in music therapy. Prerequisite: Mu 491

Mu 495 CLINICAL EXPERIENCE III—MUSIC THERAPY 0-2-1

Supervised field experience (observation and participation) in an approved clinical facility. Minimum of 30 clock hours total for each clinical experience. Music Therapy Majors

Mu 499 PROFESSIONAL INTERNSHIP IN MUSIC THERAPY

Six months of supervised practical experience with a registered music therapist in an NAMT approved facility. Taken only after completion of all other music therapy degree requirements. P.O.I.

APPLIED MUSIC AND MUSICAL ORGANIZATIONS

Students in Applied Music are advanced as rapidly as their ability permits. The study of technical exercises and literature from various music periods and styles is essential in all applied areas. To receive credit in music ensembles, attendance at rehearsals and public performances must meet standards established by the faculty director. Students may register for music ensembles with or without credit. In addition to the established ensembles, other ensembles may be organized under faculty supervision and offered for credit. All ensembles may be repeated for credit and all are applicable toward the Fine Arts core requirements.

MU 268 VOICE 1 2-5-1 (c)

Mu 269 PIANO 1 2-5-1 (c)

Students with no piano background or limited background will be enrolled in piano class for one or more semesters before enrolling for private piano lessons. Music majors will register for Music 117, non-music majors will register for Music 113.

Mu 270 ORGAN 1 2-5-1 (c)

Mu 271 VIOLIN 1 2-5-1 (c)

Mu 272 VIOLA 1 2-5-1 (c)

Mu 273 CELLO 1 2-5-1 (c)

Mu 274 STRING BASS 1 2-5-1 (c)

Mu 275 GUITAR 1 2-5-1 (c)

Mu 276 FLUTE 1 2-5-1 (c)

Mu 277 CLARINET 1 2-5-1 (c)

Mu 278 OBOE 1 2-5-1 (c)

*Contingent upon sufficient enrollment and availability of staff.

(c) Courses applicable to the General Education core requirements.

Mu 279 BASSOON $\frac{1}{2}$ -5-1 (c)

Mu 280 SAXOPHONE $\frac{1}{2}$ -5-1 (c)

Mu 281 TRUMPET/CORNET $\frac{1}{2}$ -5-1 (c)

Mu 282 FRENCH HORN $\frac{1}{2}$ -5-1 (c)

Mu 283 TROMBONE $\frac{1}{2}$ -5-1 (c)

Mu 284 BARITONE $\frac{1}{2}$ -5-1 (c)

Mu 285 TUBA $\frac{1}{2}$ -5-1 (c)

Mu 286 PERCUSSION $\frac{1}{2}$ -5-1 (c)

Mu 360 COLLEGE CHORALE 0-1- $\frac{1}{2}$ (c)

Meeting once a week, the Chorale is a select mixed vocal ensemble chosen via audition.



Mu 361 CONCERT CHOIR 0-3-1 (c)

Open to any student—acceptance based upon audition by appointment. In addition to campus and television performances prior to Christmas and participation in the annual Spring Concert, this group sings approximately twenty concerts in churches and schools in Pennsylvania and neighboring states each spring.

Mu 362 CHORAL UNION 0-2- $\frac{1}{2}$ (c)

Meeting two hours a week, the Choral Union is a mixed vocal ensemble open to any member of the student body without prior audition.

Mu 363 WOODWIND ENSEMBLE 0-1- $\frac{1}{2}$ (c)

Mu 364 BRASS ENSEMBLE 0-1- $\frac{1}{2}$ (c)

Mu 365 ORCHESTRA 0-3-1 (c)

Mu 366 PIANO ENSEMBLE 0-1- $\frac{1}{2}$ (c)

The Piano Ensemble exists for giving students the opportunity of sight-reading, learning, and occasionally performing works for more than one pianist.

Mu 367 STRING ENSEMBLE 0-1- $\frac{1}{2}$ (c)

String Ensemble is open to any student subject to approval by the director. Students study and perform string ensemble literature from the baroque to contemporary periods.

Mu 368 JAZZ BAND 0-1 $\frac{1}{2}$ - $\frac{1}{2}$ (c)

The Elizabethtown College Jazz Band serves as an integral part of the college curriculum. It functions as a lab-band and as a touring band playing the best in swing and jazz with the big band sound. Their program of music includes swing, pop tunes, ballads, and jazz including old standards and current progressive jazz.

Mu 369 CONCERT BAND 0-3-1 (c)

Open to any qualified student—acceptance subject to approval by director. Performances include the annual Winter and Spring concerts, plus a number of off-campus appearances.

(c) Courses applicable to the General Education core requirements.

DEPARTMENT OF OCCUPATIONAL THERAPY

BACHELOR OF SCIENCE

The study of occupational therapy seeks to prepare the student to: a) understand and appreciate the cognitive, cultural, physical, psychological, and social processes involved in the developmental stages of the human being; b) provide treatment to those persons whose abilities to cope with life are impaired by cultural and developmental deficits; and c) continue with graduate study. Requirements for B.S. in Occupational Therapy

A. Required courses for the major are: O.T. 113, 114, 211, 213, 214, 215, 216, 217, 225, 302, 307, 311, 317, 318, 411, 412, 413, 415, 416, 417, 418. Students must also complete major related requisites of: Ch 101, 104; Bio 103, 217, 318; Psych 105, 225, 226; An 102 or 311; Soc 340 or Com 302. Recommended courses: Ma 151; Psych 232 or 322

B. Academic and Field-Work Education

1. The student will pursue a four-year course of didactic study and complete six to eight months of field-work education. The Bachelor of Science Degree in Occupational Therapy will be awarded upon satisfactory completion of all didactic study and six months of field-work education. The student may elect one of the three options stated below in order to complete this entire program.

a. First Option: Student may

1. complete three years academic work followed by
2. three months full-time field work experience the summer between the junior and senior years.
3. complete the senior academic year followed by
4. three months full-time field work experience the summer after the senior academic year.

b. Second Option: Student may

1. complete four years of full-time academic work followed by
2. six months of full-time field work experience.

c. Third Option: Student may

1. complete three years of full-time academic work.
2. spring semester, junior year, enroll in either one or two senior level O.T. courses.
3. complete three months full-time field work experience the summer between the junior and senior years.
4. complete remaining didactic studies the fall semester, senior year.
5. complete three months full-time field work experience the spring semester, senior year.

2. Additional Field Work Education (Optional)

- a. After completing the required six months field work, the student may elect to complete two additional months of clinical experience and may elect to pursue this in any of the following areas: child psychiatry, mental retardation, neurophysiology, advanced psych/social and physical rehabilitation, research, administration, education.

C. National Certification Examination

Upon the awarding of the degree in occupational therapy, the student will be eligible to sit for the national certification examination. The examination will be held twice a year on the last Saturday of the months of June and January.

D. Admission Requirements for Department

1. Prior to Admission into Department:

- a. The student will have an interview with a member of the occupational therapy department in order to determine eligibility.
- b. The Occupational Therapy Faculty will select the students for the next academic year and submit their names to the Admissions Department.

2. Evaluation After Admission into Department:

- a. Admission into the Occupational Therapy Department does not imply that a student will be guaranteed completion of the entire course of study nor will be eligible to sit for the certification examination. The student will be reviewed by a faculty evaluation committee at the conclusion of each academic year. If the committee believes that a student is not suitable academically or professionally for the area of study, he/she will be counseled into other areas of endeavor. Standards which are to be maintained by the student in order to remain in the department are:

1. Student must have at least a 2.5 average in all of the major's required courses (both the occupational therapy and the related requisites).
2. Student must satisfactorily meet the standards and requirements in all phases of field work education (including clerkship, laboratory, field work experience).

This program may be subject to revision during the period, 1977-79. The Department formally received accreditation in 1976 by the American Occupational Therapy Association and the American Medical Association.

COURSE OFFERINGS

O.T. 113-114 BASIC CONCEPTS IN OCCUPATIONAL THERAPY 2-3-3

Introduction to theoretical basis for practice of occupational therapy. Meaning of purposeful and creative activities to human beings throughout history discussed. Anthropological viewpoint shared. Use of activity to foster normal development and to treat emotional and social dysfunction. Related field trips.

O.T. 211, 213, 214, 215, 216 LIFE TASKS: BASIC MATERIAL CULTURE (each unit) 1-3-1

Introduction to activity and media (Dev. Lab.-211, Textiles-213, Graphics-214, Pottery-215, Wood-216) basic to humans throughout history. An examination and study of creative, cultural, and therapeutic value of media when applied to health-care treatment setting. Analysis of activities and problem-solving emphasized. (211, 213, 215 Fall; 214, 216 Spring)

O.T. 217 KINESIOLOGY 2-2-3

Understanding functional anatomy emphasizing normal and abnormal human motion. Analysis of functional anatomy correlated with cultural, mechanical, psychological, physiological principles. Prerequisite: P.O.I.

O.T. 225 HUMAN DEVELOPMENT LAB 0-4-1

Refer to Psych 225 for lecture description. O.T. Laboratory: Emphasis on physical, cognitive, emotional, social areas in early developmental years. Co-Requisite: Psy 225

O.T. 302 PERSPECTIVES IN PEDIATRICS 2-3-3

Overview of pediatric conditions with emphasis on occupational therapy methods and theories. The therapeutic relationship with children from birth to puberty stressed. Prerequisite: P.O.I. (Spring)

O.T. 307 NEURO-BEHAVIORAL SCIENCE I: NEUROLOGY 3-0-3

Review: basic neuro-anatomy, neuro-physiology. Emphasis: functional neuronal systems; motor, sensory, limbic with associated behavioral correlate and higher cortical functions. Prerequisite: Bio. 217, 318 (Fall)

O.T. 311 NEURO-BEHAVIORAL SCIENCE II: PSYCHIATRY 2-2-3

Behavioral approach to the study of psychiatric, neuropsychiatric disorders, and community problems. Intervention and prevention prime treatment approaches. (Fall)

O.T. 317 PSYCH-SOCIAL REHABILITATION 4-8-4

Examining major psychiatric concepts relevant to occupational therapy: primary emphasis: theory application utilizing evaluation tool, goal planning, activity analysis, treatment techniques, and clinical experience. Prerequisite: P.O.I.

O.T. 318 PHYSICAL REHABILITATION 6-8-5

Evaluation techniques and therapeutic remediation of individuals with physical dysfunction. Activity analysis. Daily living activities. Prosthetics and orthotics. Clinical experience. Medical lectures included. Prerequisite: P.O.I.

O.T. 411 LIFE TASKS: ADVANCED CONCEPTS WITH MATERIAL CULTURE 2-2-3

Skills selected for further exploration: Self-care, group work, communication or creative skills. Teaching methods, problem-solving, therapeutic value of activities stressed. Prerequisite: P.O.I.

O.T. 412 SENIOR PRACTICUM 1-4-3

Designed to offer student the opportunity to conduct scholarly research experiment within area of major. Prerequisite: P.O.I.

O.T. 413 SENSORY INTEGRATION 4-8-4

Comprehensive study of sensory integration of the CNS: Standardized evaluation procedures, syndromes of dysfunctions, remediation techniques within a developmental framework, and clinical experience. Prerequisite: P.O.I.

O.T. 415, 416, 417, 418 ADVANCED CONCEPTS IN O.T. AND HEALTH-CARE (each module) 1-1-1

Students will explore and attempt to problem solve various advanced concepts within occupational therapy and health related professions. Four modules presented: Health Care Systems (regional, state, federal, international), Related Cultures and Health Care, Biofeedback Treatment Applied to O.T., Interpersonal Communication Codes. 415, 417 (Fall); 416-418 (Spring)

DEPARTMENT OF PHYSICAL EDUCATION AND HEALTH

The Department of Physical Education and Health affords an opportunity for all students to develop an interest in play and recreation that will be fun and worthwhile to them during college and later life. We strive to develop social and moral standards such as sportsmanship, teamwork, tolerance, and other character benefits which come from properly conducted play.

All students at Elizabethtown College are required to take four semester hours of physical education courses. This requirement includes at least one semester of an aquatics activity. The aquatics requirement can be waived by successful completion of a proficiency test. Two of the four semester requirements may be taken in aquatics. The remaining physical education requirements may be satisfied by electing from any of the courses offered except PE 270, PE 275, and PE 285.

COURSE OFFERINGS

PE 105 BEGINNING SWIMMING (WOMEN) 0-2-1 (c)

Instruction for non-swimmers of the basic strokes on an elementary level.

PE 115 INTERMEDIATE SWIMMING (WOMEN) 0-2-1 (c)

Instruction and techniques of the basic strokes—survival swimming and water safety.

PE 125 BEGINNING SWIMMING (MEN) 0-2-1 (c)

Instruction for non-swimmers of the basic strokes on an elementary level.

PE 135 INTERMEDIATE SWIMMING (MEN) 0-2-1 (c)

Instruction and techniques of the basic strokes—survival swimming and water safety.

PE 145 FIELD HOCKEY—VOLLEYBALL (WOMEN) 0-2-1 (c)

Rules, playing techniques, and skill development.

PE 150 ADAPTED PHYSICAL EDUCATION 0-2-1 (c)

Individual activity or corrective exercises adapted to the needs and abilities of the student. Entry is dependent upon recommendation of a physician. Graded P-NP.

PE 155 TENNIS—BOWLING (COED) 0-2-1 (c)

Rules, playing techniques, and skill development.

PE 160 ADAPTED PHYSICAL EDUCATION 0-2-1 (c)

See Description at PE 150.

PE 165 GOLF—BADMINTON (COED) 0-2-1 (c)

Rules, playing techniques, and skill development.

PE 185 BASKETBALL (WOMEN) 0-2-1 (c)

Rules, playing techniques, and skill development.

PE 195 BASKETBALL—SOCCER (MEN) 0-2-1 (Fall) (c)

Rules, playing techniques, and skill development.

PE 205 ARCHERY—BADMINTON (COED) 0-2-1 (c)

Rules, playing techniques, and skill development.

PE 210 BASKETBALL (MEN) 0-2-1 (Spring) (c)

Rules, playing techniques, and skill development.

PE 215 SPORTS APPRECIATION (COED) 2-0-1 (c)

To develop an awareness of the role played by sports, as a viable part of our society.

PE 217 SENIOR LIFE SAVING 0-2-1 (c)

Knowledge and practice in life saving, water safety and pool management. Meets Red Cross certification requirements. Graded P-NP.

(c) Courses applicable to the General Education core requirements.

PE 218 WATER SAFETY INSTRUCTION (COED)
0-2-1 (c)

Prerequisite: current Senior Life Saving Certificate.
 Advanced skill in life saving, swimming instruction and use of pool equipment. Meets Red Cross Instructor certification requirement. Graded P-NP.

PE 225 TENNIS (WOMEN) 0-2-1 (Fall) (c)

Rules, playing techniques, and skill development.

PE 235 TENNIS (MEN) 0-2-1 (Fall) (c)

Rules, playing techniques, and skill development.

PE 240 BOWLING 0-2-1 (c)

Rules, playing techniques, and skill development.

PE 245 RACQUETBALL (WOMEN) 0-2-1 (c)

Rules, playing techniques, and skill development.

PE 250 VOLLEYBALL (COED) 0-2-1 (c)

Rules, playing techniques, and skill development.

PE 255 HANDBALL—RACQUETBALL (MEN) 0-2-1 (c)

Rules, playing techniques, and skill development.

PE 260 ADAPTED PHYSICAL EDUCATION 0-2-1 (c)

See description at PE 150.

PE 265 PHYSICAL CONDITIONING (COED) 0-2-1 (c)

Techniques of exercise, jogging, weight-training, and body development.

PE 270 ADVANCED INDIVIDUAL SPORTS 3-0-3

Methods, techniques and teaching skills in selected sports. Taught summer session only.

PE 275 CONTEMPORARY HEALTH PROBLEMS 3-0-3

A study of the physical, mental and social aspects of personal and community health problems in the contemporary setting. Educational principles applied to teaching in the elementary school situation.



**PE 285 PHYSICAL EDUCATION FOR THE
 ELEMENTARY SCHOOL CHILD 3-0-3**

A study of physical growth of children from ages 4-12, and consideration of games and activities appropriate to physical development of the child in the elementary grades.

PE 290 INTERPRETIVE DANCE THEORY (COED)
0-2-1 (c)

To develop an awareness of the body instrument as a medium for communication of ideas, thoughts, and feelings through dance.

**PE 295 INTRODUCTION TO BODY MOVEMENT AND
 DANCE FORM (COED) 0-2-1 (c)**

Disciplines of ballet and muscular control.

**PE 370-380 SPECIAL TOPICS IN PHYSICAL
 EDUCATION (COED) 0-2-1 (c)**

These courses may include such physical activity courses as horsemanship, bicycling, self-defense techniques, skiing, etc., for which there will likely be an extra charge. Graded P-NP.

**PE 481-490 SELF-DIRECTED PHYSICAL EDUCATION
 ACTIVITY—One credit (c)**

Designed for the student attending Evening Division, studying abroad, or for extenuating circumstances which prohibit the student from meeting regularly scheduled physical education classes. Graded P-NP.

DEPARTMENT OF PHYSICS AND EARTH SCIENCE

BACHELOR OF SCIENCE

By means of varied learning situations, the department offers both professional and liberal arts oriented studies designed to prepare students for one or more of the following: 1) graduate school; 2) employment in industry; 3) secondary school teaching; 4) engineering (see below); 5) understanding of the physical universe. Together with formal course instruction, additional learning may come about through use of well equipped labs, a large capacity digital computer, computer interfacing laboratory, machine shop, and planned and unplanned encounters with qualified faculty and students.

B.S. with Major on Physics

There are two options available; option I for the student interested in graduate school or industrial work, and option II for the student interested in teaching Physics at the secondary level. Phy 232, Phy 343, Phy 404, Ch 104, Ma 222 are required for both options.

Option I: Phy 306, Phy 344, Phy 345, Phy 403, Phy 408, Phy 490, six credits of electives from Ma 201, Ma 321, Ma 322, Ma 351, and Ma 362.

Option II: Bio 103, Bio 104, CS 105; and six credits of electives from the offerings of the department of Physics and Earth Sciences.

Cooperative Engineering Major

Upon successful completion of this five-year program, the student will receive a B.A. degree from Elizabethtown and a B.S. degree from The Pennsylvania State University. The last two years of the program will be taken at The Pennsylvania State University at State College, Pennsylvania.

Curricula which Elizabethtown College students will be qualified to enter at The Pennsylvania State University are: petroleum and natural gas, agricultural, chemical, civil, electrical, environmental, industrial, mechanical, mining, and nuclear engineering; ceramic and engineering science; and metallurgy. In order to be eligible for admission to The Pennsylvania State University the student must have a 2.0 cumulative average for course work at Elizabethtown College and be recommended by Elizabethtown College. Students who have studied at The Pennsylvania State

University prior to matriculation at Elizabethtown College must have a quality point average of at least 2.5 for all college work taken.

At Elizabethtown College the student will complete Phy 232, Dr 116, Ma 222, Ma 321, Ch 104, Phy 306 and other courses. Full information is available from the department.

Secondary General Science Certification

The teaching certificate program in general science with a physics concentration requires: Phy 132, 231, 343, 404, and any other courses numbered with the prefix Phy or Dr.

The teaching certificate program in general science with an earth science concentration requires: ES 107, 108, 111, 112, 202, 203, 301, 302, 303, and 401.

COURSE OFFERINGS

Phy 111 INTRODUCTION TO PHYSICS 3-2-4 (c)

An introduction to the concepts of physics through a study of the laws of motion, energy, electricity, light, relativity, radioactivity and other topics of interest. (fall)

Phy 112-211 GENERAL PHYSICS I and II 3-2-3 Each (c)

A comprehensive study of the principles of physics with applications. Topics of heat, light, electricity, radioactivity, optics, equilibrium, and motion will be treated. A course for those not planning further studies in Physics. Prerequisite: Ma 101 (spring and fall)

Phy 132, 231, 232 COLLEGE PHYSICS I, II and III 3-2-4 Each (c)

A unified study of the laws of mechanics, thermodynamics, wave theory, electric and magnetic fields, and optics, and their applications, utilizing differential and integral calculus. A course for those planning a career in, or the teaching of, the physical sciences. Corequisites: Ma 121, 122, 222 respectively (spring, fall, spring)

(c) Courses applicable to the General Education core requirements.

Phy 305-306 INTRODUCTION TO THEORETICAL MECHANICS 3-0-3 Each (c)

A study of force, acceleration, work, energy, impulse, momentum, stress and strain. Linear and rotary motion will be analyzed including the use of various types of reference coordinates and vector analysis. Prerequisite: Phy 232, Ma 222 (fall, spring)

Phy 333 COMPUTER SYSTEMS INTERFACING 1-6-3

Digital logic and integrated circuits to implement logic; architecture and machine language programming of minicomputers and microprocessors; design, testing and construction of instrument-to-computer and computer-to-computer interfaces; design and testing of supporting software.

Phy 343 INTRODUCTION TO QUANTUM THEORY 3-0-3 (c)

An introduction to the principles of quantum theory, radiation, atomic spectra, and the extranuclear structure of the atom. Prerequisites: Phy 232, Ma 222 (fall)

Phy 344 MODERN PHYSICS 3-0-3 (c)

An introduction to nuclear and atomic processes. Radioactivity, the nuclear force, nuclear interactions, quantum statistics, solid state applications and elementary particles will be studied. Prerequisite: Phy 343 (spring)

Phy 345 ADVANCED PHYSICS LABORATORY 0-5-2 (c)

An advanced laboratory with experiments in modern physics, electricity and magnetism, optics and thermodynamics. Students will be exposed to a variety of experimental techniques. Prerequisite: Phy 343 (spring)

Phy 371 ANALOG COMPUTER PROGRAMMING 2-0-2

A self-paced course in solving differential equations using the analog computer including a study of amplitude and time scaling. Graded Pass-No Pass (offered for individuals or groups by request) Prerequisite: P.O.I.

Phy 403 KINETIC THEORY AND THERMODYNAMICS 3-0-3 (c)

A study of the kinetic theory of matter, statistical mechanics, and the principles of thermodynamics including temperature, heat,

work, internal energy, entropy, and enthalpy. Prerequisites: Phy 232, Ma 222 (Alternate years; fall, 1977)

Phy 404 ELECTRONICS 3-3-4 (c)

The basic components of electronic circuits will be studied, including vacuum tubes, transistors, diodes and integrated circuits. Fundamental circuits will be analyzed. Prerequisites: Phy 232 (spring 1978 and alternate years)

Phy 407-408 ELECTRICITY AND MAGNETISM 3-0-3 (c)

The theory of the static and dynamic forces and fields associated with basic particles, electrical components, measurements, alternating current, radiation, Maxwell's equations and special relativity. Prerequisite: Phy 232 (fall and spring)

Phy 490 SEMINAR 2-0-2 (c)

Experimental or theoretical study under the direction of a staff member. A formal report of work will be required. P.O.I. will be granted only after a written proposal of study is received and accepted by a faculty member in the department.

Phy 481-489 INDEPENDENT STUDY Variable Credit (c)

Study and experimentation in an area of interest to the student and faculty member. Prerequisite: P.O.I.

Dr. 115-116 DRAWING AND DESCRIPTIVE GEOMETRY 1-5-2

A study of reference planes, points, lines, curved surfaces, revolutions, true sizes, intersections, orthographic projection, isometric drawing, auxiliary views, sections, and developments. Fall and spring 1976-77 & alternate years

Ed. 305 PRACTICUM IN SECONDARY EDUCATION, SCIENCE 6-3-6 (see Education)

EARTH SCIENCES COURSE OFFERINGS

ES 105 FIELD EARTH SCIENCE 8 (c)

An intensive introductory program of field and laboratory studies emphasizing in situ instruction. Included are geologic and topographic mapping and inquiry oriented investigations of the earth

and atmosphere. Prerequisite: P.O.I. (Offered only in Summer Sessions)

ES 107 ASTRONOMY 3-2-4 (c)

General principles of solar system and stellar astronomy. Labs provide practical experience in determining astrometric quantities. Algebra is used to treat topics throughout the course. (fall)

ES 108 METEOROLOGY 3-2-4 (c)

General studies of causes, effects and distribution of atmospheric phenomena. Labs include collection and analysis of weather and climatic data. (spring)

ES 111 PHYSICAL GEOLOGY 3-2-4 (c)

The study of the physical Earth incorporating its materials, processes, and forms. Among the subjects included are minerals, rocks, volcanoes, glaciers, earthquakes, and continental drift. (fall and spring)

(c) Courses applicable to the General Education core requirements.



ES 112 HISTORICAL GEOLOGY 3-2-3 (c)

The study of the history of the Earth and its life forms as well as the methods utilized to decipher the Earth's past. Prerequisite: ES 111 (spring)

ES 202 GEOMORPHOLOGY 2-0-2 (c)

The study of landforms, their distribution, origin, and classification. Landforms of North America are emphasized with the use of topographic maps and air photographs. Prerequisite: ES 111 (Offered alternate years: spring 1978)

ES 203 PALEONTOLOGY 1-2-2 (c)

Principles of classification and time referenced changes of prehistoric life. Labs include studies in morphology and identification of invertebrate fossil forms. Prerequisite: ES 112 (Offered Alternate Years: fall, 1978)

ES 301 MINERALOGY/PETROLOGY 2-2-3 (c)

An introduction to systematic crystallography and mineralogy, stressing identification and associations. Igneous and metamorphic petrology includes genetic processes and microscopic and hand specimen petrography. Prerequisites: ES 111 (fall)

ES 302 SEDIMENTOLOGY 2-2-3 (c)

Processes of sedimentation in space and time. Laboratory techniques and sedimentary petrology are supplemented with extensive field studies of Paleozoic through Recent deposits. Prerequisite: ES 112 (Offered alternate years: fall, 1977)

ES 303 GEODYNAMICS 2-2-3 (c)

Studies of deformational processes of the Earth and resulting geologic structures. Solid-earth geophysics and global tectonics are studied. Prerequisites: ES 111 (spring)

ES 401 SEMINAR 1-0-1 (c)

Readings and discussions of selected topics in the earth sciences are required. Prerequisite: Six credits above 100 level courses. (Offered on demand)

ES 481-490 INDEPENDENT STUDY Variable Credit (c)

Students are required to define and do significant research on a problem in the earth sciences. Prerequisite: Six credits above 100 level courses and P.O.I.

DEPARTMENT OF POLITICAL SCIENCE

BACHELOR OF ARTS

The department aims to assist the student in thinking rationally about political questions through training in normative, empirical, and policy-oriented approaches to matters of public policy which he will face as a political analyst, administrator, businessman, lawyer, educator, or citizen. A major in political science serves as preparation for graduate or law school, or a career in governmental administration, teaching, regional and urban planning, research, and the diplomatic service, among others.

A. B. with Major in Political Science

Required courses are those comprising the principal subfields of the discipline: PS 117 and 118, 202, 205, 301, 308, and 398. The remaining 12 hours may be chosen from any combination of departmental offerings for a total of 33 hours. General electives from the other social sciences are encouraged, with Soc 301 strongly recommended.

Comprehensive Social Science Programs in Political Science

Prospective secondary education teachers wishing certification in Social Studies with a Political Science major are required to take the following courses for a total of 24 hours: PS 117 and 118, 202, 205, 301, 303 or 308, 398 and an elective. Certification with a minor requires PS 117 and 118, 205, and an elective for a total of 12 hours. The interdisciplinary Social Science program requires the following: Major of 24 hours—PS 117 and 118, 202, 205, 301, 303 or 308, 398, and an elective. Minor of 15 hours—PS 117 and 118, 202, 205, and an elective. Those taking only three hours should take PS 117.

COURSE OFFERINGS

PS 105 INTRODUCTION TO GOVERNMENT 3-0-3 (c)

The functions of government and differing types of government, emphasizing the relationship existing between the individual and government in democratic, authoritarian, and totalitarian systems.

(c) Courses applicable to the General Education core requirements.

PS 117-118 AMERICAN POLITICAL INSTITUTIONS I AND II 3-0-3 each (c)

Evolution of U.S. political institutions since independence, with emphasis on current issues. First semester includes national executive, legislative, and judicial branches. Second semester covers public opinion, elections, ethnic politics, federalism, and the political process at state and local levels. (Offered both semesters)

PS 202 POLITICAL THEORY 3-0-3 (c)

Analysis of the development of significant political ideas from the Greek city-state to the present.

PS 205 INTERNATIONAL RELATIONS 3-0-3 (c)

Survey of political, economic, legal, psychological and military features of international relations with consideration of national interest, foreign policy, diplomacy, alliances, and balance of power.

PS 301 COMPARATIVE GOVERNMENTS 3-0-3 (c)

Structural-functional comparison of political systems of selected foreign nations, emphasizing party systems, political cultures, and executive-legislature relations in the context of historical development.

PS 303 POLITICAL PARTIES AND INTEREST GROUPS 3-0-3 (c)

Basic definitions and popular stereotypes, the practical functioning framework, organization and operation, and major problems in contemporary American party politics. Prerequisite: PS 117 or 105.

PS 308 PUBLIC ADMINISTRATION 3-0-3 (c)

Administrative organization, personnel administration, decision-making, and communications. Emphasis on relationship of administrative bureaus to the public, executive office, legislative, and judiciary.

PS 327 LATIN AMERICAN POLITICS 3-0-3 (c)

Political culture and processes, with country studies and developmental models to illustrate diverse political styles and approaches to current issues.

PS 342 POLITICS OF DEVELOPING NATIONS 3-0-3 (c)

Interdisciplinary theories of political development analyzed and applied in specific case studies of contemporary nation-building in transitional societies.

PS 370-379 SPECIAL PROBLEMS 3-0-3 (c)

Readings and discussions in topical areas and problems of political science, with subjects chosen in accord with student demand.

PS 381 THE POLITICAL NOVEL 3-0-3 (c)

An examination of political values as reflected in fiction. The student will be encouraged to confront his own political values and the values of others. P.O.I.

PS 398 JUNIOR SEMINAR 3-0-3 (c)

A study of techniques of empirical political research and development of modern methods of analysis and data presentation in political science, with reference to contributions from other social sciences. A major research project on methodology is required.

(c) Courses applicable to the General Education core requirements.

PS 405 CONSTITUTIONAL LAW 3-0-3 (c)

History and development of the Constitution. Leading decisions of the Supreme Court evaluated with emphasis on current decisions and cases in the light of history and possible future trends.

PS 412 CITIZEN POLITICS 3-0-3 (c)

A practical politics course, geared to enhancing citizen effectiveness at all levels of government. P.O.I.

**PS 471 CAPITOL SEMESTER INTERNSHIP
6 credits P.O.I.**

Applied field experience in public administration as a junior assistant in the daily operations of state or local government agencies. (fall)

PS 480-489 INDEPENDENT STUDY Variable Credit (c)

Designed to offer independent study to advanced students making use of techniques of political science in specific problem areas not included in the department's regular offerings.



DEPARTMENT OF PSYCHOLOGY

BACHELOR OF ARTS

The Psychology Department aims to nurture in the student both the sensitivity of human understanding and skills of scientific thought. It helps the student acquire the content and methods for describing, predicting and understanding behavior in order to prepare him for careers in human services or graduate and professional training in education, counseling, religion, business, and clinical and experimental psychology.

Required courses for the psychology major are Psychology 105, 213-214, 317, 318, 321, 402, and one of the following: 413, 414, or 416, and psychology electives for a minimum of 33 semester hours. Students are strongly urged to complete Bio 103 and 104 as their science elective.

Required courses for comprehensive social science major with a psychology major are Psychology 105, 213, 214 and 13 additional hours in psychology; with a psychology minor, Psychology 105 and electives to meet the prescribed number of credit hours.

COURSE OFFERINGS

Psy 105 GENERAL PSYCHOLOGY 3-0-3 (c)

An introduction to the study of behavioral science including consideration of motivation, learning, emotions, personality, and sensory and perceptual processes.

Psy 205 EDUCATIONAL PSYCHOLOGY 3-0-3 (c)

The application of the principles of psychology to the problems of learning and teaching including a study of classroom situations. Prerequisite: Psy. 105

Psy. 213-214 MODES OF PSYCHOLOGICAL INQUIRY I AND II 3-2-4 Each (c)

Training in the formulation, evaluation, and communication of problems of psychological interest including the study of experimental design, statistics, theory formulation and evaluation, and the philosophy of science. Prerequisite: Psy. 105.

Psy 215 INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY 3-0-3 (c)

An introduction of the principles of psychology to the problems of people at work including topics of personnel selection, training, performance evaluation, motivation, and human factors research. Prerequisite: Psy. 105

Psy 225-226 HUMAN DEVELOPMENT I and II 2-1-3; 3-0-3 (c)

A study of the life-span developmental processes including principles of ontogenetic development, acquisition of cognitive competency, socialization processes, normative trends of physiological and emotional growth. First semester covers prenatal development to adolescence; second semester, adolescence through old age. Prerequisites: for Psy. 225: Psy 105 or Soc 101; for Psy. 226: Psy 225 or parallel course in other department.

Psy 235 SOCIAL PSYCHOLOGY 3-0-3 (c)

An introduction to the application of psychological principles in the understanding of social phenomena, including social structure, the socialization of the child, interpersonal processes, and group processes. Prerequisite: Psy 105

Psy 317 EXPERIMENTAL PSYCHOLOGY II: LEARNING 3-2-4 (c)

Study of major theories, methods, and empirical findings in the area of both human and animal learning. Students conduct various animal conditioning experiments. Prerequisites: Psy 214 (Fall)

Psy 318 STATISTICS 3-0-3 (c)

A continuation of Psy 213, emphasizing analysis of variance, varieties of correlation, errors of measurement, and selected non-parametric procedures. Prerequisite: Psy 213 (Spring)

Psy 321 PERSONALITY: THEORY AND RESEARCH 3-0-3 (c)

An critical survey of theories of personality including a study of their origin, related research, and application to understanding personality development. Prerequisite: Psy 105 (Fall)

Psy 322 ABNORMAL PSYCHOLOGY 3-0-3 (c)

Consideration of neurosis, psychosis, and personality disorders—their origin, treatment, prognosis, and prevention. Attention is given to the adequacy of adjustment of both normal and deviant behavior. Prerequisite: Psy 105 (Spring)

Psy 333 TESTS AND MEASUREMENTS 2-2-3 (c)

An introduction to standardization, validity, and reliability of psychological tests, including the study of standardized tests, and their interpretation. Prerequisite: Psy 105 (Spring 1979)

**Psy 370-379 SPECIAL PROBLEMS IN PSYCHOLOGY
Variable Credit (c)**

Directed study in topics not otherwise covered in the curriculum. Offered when student interest and faculty availability justify. Prerequisite: P.O.I.

Psy 387 PSYCHOLINGUISTICS 3-0-3 (c)

An introduction to the nature of language and its relation to human thought and communication. This course concerns the child's intuitive acquisition of syntax (generative grammar) as perceived by Noam Chomsky and his followers. Topics treated include aphasia (loss of speech), dialect investigation, phonology. Prerequisite: P.O.I.

**Psy 402 HISTORY AND SYSTEMS OF PSYCHOLOGY
3-0-3 (c)**

A study of major historical systems in psychology, including the evolution of various positions in contemporary psychology and attempts to reconcile these positions. Prerequisite: Psy 214 (spring)

**Psy 413 EXPERIMENTAL PSYCHOLOGY III:
PERCEPTION 3-0-3 (c)**

A study of problems and theories of sensory and perceptual functioning. Students may be asked to conduct laboratory studies. Prerequisite: Psy 214 (spring 1978)

**Psy 414 EXPERIMENTAL PSYCHOLOGY IV:
COGNITION 3-0-3 (c)**

A study of selected investigations in memory, attention, information processing, and thought. Students may be asked to conduct laboratory studies. Prerequisite: Psy 214 (fall 1977, spring 1979)

(c) Courses applicable to the General Education core requirements.

**Psy 416 EXPERIMENTAL PSYCHOLOGY V:
MOTIVATION 3-0-3 (c)**

A study of various topics within the field of motivation. Psychological as well as physiological data will be considered. Prerequisite: Psy 214 (fall 1978)

Psy 471-472 FIELD STUDY Variable Credit (2-6) (c)

Supervised training and experience in a professional setting related to psychology plus individual meetings and seminars with faculty. Placement depends on the student's interests and professional goals. Prerequisite: P.O.I.

Psy 473-474 RESEARCH PRACTICUM Variable Credit (c)

Research in psychology under the close supervision of a faculty member. Subjects for research are chosen in an area of interest to both persons. Prerequisite: Psy 214 and P.O.I. (Offered by individual faculty-student arrangement.)

**Psy 480-489 INDEPENDENT STUDY IN PSYCHOLOGY
Variable Credit (c)**

This course offers the mature student the opportunity to independently pursue educational experiences not otherwise available in the curriculum. Prerequisite: P.O.I.

DEPARTMENT OF RELIGION AND PHILOSOPHY

BACHELOR OF ARTS

Using the heritage of religion and philosophy, the Department seeks to broaden the student's liberal arts curriculum by pursuing creative ventures which often cross-over traditional disciplinary lines. While committed to the Judaeo-Christian tradition, the Department does not profess a single denominational consensus; it operates in the midst of a complex and pluralistic religious field. We encourage in the student a reflective stance which focuses on the basic philosophies, value systems, and faith expressions of mankind, as means of preparing one for seminary, graduate work, social work, counselling and journalism.

B.A. with Major in Religion and Philosophy

A major shall complete 33 hours of course work in the Department beyond the 6 hours required in the General Education core. At least 27 hours of this course work must be above the 100 level and all majors will be required to complete a senior research project to be supervised and read by at least two members of the department.

Students seeking a double major shall complete 24 hours of course work in the department beyond the 6 hours required in the General Education Core. At least 18 hours of this course work must be above the 100 level and must include one 3 hour Independent Study (Rel. or Phil. 480-89). Students desiring a double major shall declare their intentions to the department during their Junior year.

COURSE OFFERINGS

Religion

Rel 105 THE BIBLE: THEMES AND ISSUES 3-0-3 (c)

An introduction to the scriptures of Judaism and Christianity with special emphasis upon their original setting in life. An important aspect of the course is familiarization with techniques of Bible study.

(c) Courses applicable to the General Education core requirements.

Rel 115 RELIGION AND MODERN MAN 3-0-3 (c)

A course designed to explore the experiential meaning of "religion" as well as some of its classical statements, interpretations and traditions. It surveys various Eastern and Western religious traditions from a phenomenological, cultural, and comparative point of view.

Rel 125 CONTEMPORARY RELIGIOUS ISSUES 3-0-3 (c)

A constantly changing survey of relevant problems and issues on the contemporary religious scene with primary emphasis upon the thought patterns rather than the institutional forms of the Judaeo-Christian faith.

Rel 201 INTRODUCTION TO THE HISTORY, LITERATURE, AND FAITH OF ISRAEL 3-0-3 (c)

A study of the history of Israel as a basis for understanding the literature of the Old Testament and Biblical ways of faith; it also introduces the various tools of Biblical criticism.

Rel 202 INTRODUCTION TO THE HISTORY, LITERATURE, AND FAITH OF CHRISTIANITY 3-0-3 (c)

A survey of New Testament history, an orientation to the literature of the New Testament, and an appreciation of the conditions which gave rise to Christianity.

Rel 221 WESTERN RELIGIONS 3-0-3 (c)

A study of the major religions of the Near East and the Western hemisphere. Primary attention is given to an historical study of Judaism, Christianity, and Islam and the similarities and differences between these religions.

Rel 222 EASTERN RELIGIONS 3-0-3 (c)

A sympathetic encounter with the major living religions of the Far East which stresses an understanding of their diverse cultural expressions. Fosters a comparative study of Hinduism, Buddhism, Jainism, Confucianism, Taoism, Sikhism and Shinto.

Rel 231 CONTEMPORARY THEOLOGY 3-0-3 (c)

Designed to give the student a greater depth exposure to some aspect of theological thinking or study of a particular theologian or group of theologians. Rel. 125 recommended.

Rel 301-302 NEW TESTAMENT GREEK 3-0-3 each

A study of the fundamentals of *koine* Greek grammar to enable the student to read the New Testament in its original language. Offered on demand in alternate years, 1978-79. *Note:* Advanced Greek is offered only as a Directed Study.

Rel 310 ARCHAEOLOGY AND THE BIBLE 3-0-3

The significance of discoveries of recent times in Biblical archaeology will be reviewed. In addition to studying excavations in Israel, one will also consider discoveries in Mesopotamia, Egypt, and Syria. Generally, field work in Lancaster County excavations will be a part of the course. Prerequisite: Rel. 201

Rel 320 BIBLICAL THEOLOGY 3-0-3

A study of the nature and meaning of the redemptive acts of God in the history of the Hebrews and early Christians. Rel. 105 Recommended.

Rel 330 ANABAPTIST AND PIETISTIC MOVEMENTS 3-0-3

A study of the historical and theological backgrounds of the Anabaptist and Pietistic movements as they relate to the Church of the Brethren and other denominations within the context of "The Believer's Church."

Rel 340 HISTORY OF CHRISTIAN THOUGHT 3-0-3

A survey of representative thinkers in the history of the Christian Church and an examination of the central doctrines of the Christian faith. Rel. 125 Recommended.

Rel 370-79 SEMINAR IN RELIGION 3-0-3

An intensive study of a selected area within the sphere of Religious faith. This course rotates among the Departmental staff and includes such courses as: Liberation Theology; Religion in America; Evangelical Theology; Civil Religion in America; Hebrew; The Buddhist Tradition; Esoteric Religions; etc. Prerequisite: 12 semester hours of departmental coursework or P.O.I.

Rel 480-89 INDEPENDENT STUDY Variable credit

A requirement for all departmental majors. The student's research, which may be done in either religion or philosophy, will be supervised and read by two members of the Department.

PHILOSOPHY**Phil 105 CONTEMPORARY PHILOSOPHICAL ISSUES 3-0-3 (c)**

Concerns itself with such issues as human freedom, the search for the self, and meaning in human life. These concerns are introduced by means of selected literary and philosophical texts.

Phil 115 CONTEMPORARY ETHICAL ISSUES 3-0-3 (c)

An examination of current issues with attention given to the way in which moral norms function within the individual and his/her society. Emphasis placed upon heightened self-awareness and the perspective of social ethics.

Phil 201 ANCIENT AND MEDIEVAL PHILOSOPHY 3-0-3 (c)

The basic interest in this course is a comparing and contrasting of Platonic and Aristotlean views of life. These two views of life are treated as metaphors of life rather than as speculations about the nature of life.

Phil 212 AESTHETICS 3-0-3 (c)

An inquiry into the nature of creativity in the area of art and science. It is the assumption of this course that by comparing and contrasting creativity in art and science, one comes to a greater understanding of artistic creativity.

Phil 255 ADVANCED ETHICS 3-0-3 (c)

A constantly changing inquiry into the values, norms, and thought-forms utilized in the areas of Bio-Ethics, Environmental Ethics, Business Ethics, and the Ethics of Conflict and Social Change.

Phil 310 CONTEMPORARY PHILOSOPHY 3-0-3

By reading selected primary sources in existentialism and phenomenology, this course aids one's understanding of some of

(c) Courses applicable to the General Education core requirements.

the more important philosophical assumptions of our contemporary cultural situation.

Phil 320 PHILOSOPHY OF RELIGION 3-0-3

A study of man's rational efforts to establish the validity of the religious perspective with particular emphasis on theism, the proofs for the existence of God, the nature of evil, etc.

Phil 330 PHILOSOPHICAL ETHICS 3-0-3

Readings in contemporary ethical theory based upon the effort to establish and analyze a rational-pragmatic basis for value discrimination. (Offered on demand)

Phil 340 MODERN PHILOSOPHY 3-0-3

Reading and discussing of primary sources from the writings of Descartes, Spinoza, Leibnitz, and Kant. (Offered on demand)

Phil 370-79 SEMINAR IN PHILOSOPHY (OR ETHICS) 3-0-3

A constantly changing specialized study within the field of philosophy or ethics featuring such areas as: Existentialism; Philosophy of Language; Communal life-styles; Philosophy East and West. Prerequisite: 12 semester hours of departmental coursework or P.O.I.

Phil 480-89 INDEPENDENT STUDY Variable credit



DEPARTMENT OF SOCIOLOGY-SOCIAL WORK

BACHELOR OF ARTS BACHELOR OF SCIENCE

The department provides opportunity for the study of interpersonal and intergroup relationships, and the growth, changes, structures and processes of human societies. The goal of the department is to prepare the student for teaching, graduate study, and employment in research, social work and other fields where an understanding of the interrelationships of society is important.

B.S. or B.A. with major in Sociology

For the Bachelors degree, Sociology 101, 201, 301, 310, 311, and 460 are required. Additional courses may be elected from any of the Sociology or Anthropology offerings in the department for a total of 33 hours. A course in probability and statistics is required, as is the passing of the competency test in Speech or the completion of a course in speech.

The B.S. degree differs from the B.A. degree only in the College core requirements.

B.S. or B.A. with major in Sociology-Anthropology

A Bachelors degree with a combined major may be earned by taking 24 hours in Sociology, including 101, 201, 301, 310, 311, 460 and 12 hours in Anthropology. The BS differs from the BA only in the core requirements of the College.

B.S. or B.A. with major in Social Dynamics

The major requires 30 credit hours in Sociology and Anthropology including Soc 101 and 201, plus six credit hours in Political Science, six in Economics and six in Psychology. Other courses can be chosen by the student in line with his personal objectives after careful consultation with his advisor.

Teaching certificate program in Comprehensive Social Studies

The department of Sociology participates in the program for Comprehensive Social Studies Certification. Students who choose

to concentrate in Sociology-Anthropology plan individual programs to meet the standards of the State Department of Education. The concentration shall consist of 24 hours of sociology-anthropology courses and must include Soc 101, Soc 201. Each student prepares an individual program in consultation with the Social Studies advisor in the Department of Sociology and in the Department of Education. The proposed program must be approved by these representatives of both departments.

B.A. or B.S. with major in Social Work

A Bachelor's degree in Social Work requires the following courses: Soc 101, Psy 105, PS 118, EC 101, Ma 151, Com 105 (or passage of competency test), SW 222, Soc 225, Psy 225, Psy 226, SW 240, SW 325, SW 326, SW 328, SW 345, SW 346, SW 351, SW 360, SW 471-72, SW 498 plus 12 credits selected from Sociology-Anthropology, Psychology, Political Science, and/or Economics directed toward the student's professional goal and approved by the Social Work advisor.

The major is based on accreditation requirements by the Council on Social Work Education and is subject to their approval which may necessitate changes.

COURSE OFFERINGS

SOCIOLOGY

Soc 101 INTRODUCTION TO SOCIOLOGY 3-0-3 (c)

Basic concepts and theories relating to the study of the social life of man with emphasis on fundamental sociological methods and approaches.

Soc 201 PRINCIPLES OF SOCIOLOGY 3-0-3 (c)

Introduces students to the methods of social research and theory. It includes the history of the discipline, the meaning and use of key concepts, and varied approaches to the study of sociology. Pre-requisite: Soc 101.

(c) Courses applicable to the General Education core requirements.

Soc 212 POPULATION 3-0-3 (c)

A study of population, its size, growth, trends, composition; the relation of population units in their various aspects to economic, social, political, and other major forces, trends and institutions.

Soc 215 CRIMINOLOGY 3-0-3 (c)

Sociological approaches to the study of crime, with an emphasis on current sociological theory and research. Special emphasis is given to the judicial system and penology.

Soc 217 SOCIOLOGY OF RELIGION 3-0-3 (c)

An analysis of the role and function of religion and religious institutions in society, a study of religion as a social and cultural system.

Soc 220 RACE AND ETHNIC RELATIONS 3-0-3 (c)

Study of racial and other minorities in the United States, and their relationship with dominant groups. Includes study of discrimination prejudice, racial myths, and methods of reducing intergroup tensions.

Soc 225 HUMAN DEVELOPMENT SEMINAR 0-2-2 (c)

The Sociology Seminar will focus on selected sociological concepts which are relevant to human development. Taken concurrently with Psy 225.

Soc 301 SOCIAL STATISTICS 3-0-3 (c)

A companion course to MA 151, Probability and Statistics, with working application to statistical procedures used in sociological research and literature. Prerequisite: Ma 151

Soc 305 MARRIAGE AND THE FAMILY 3-0-3 (c)

A brief comparative view of different family patterns; a functional approach to questions related to both premarital and postmarital aspects of married and family life in our American culture.

Soc 310-311 SOCIOLOGICAL INQUIRY AND EXPLANATION 3-0-3, each (c)

This course will provide students with basic skills for the social researcher. Content of the course includes research design, techniques of data collection, reduction and analysis, and explanation of

information secured through all of these. Prerequisites: Soc. 201, 301

Soc 340 GROUP DYNAMICS 3-0-3 (c)

The course attempts to integrate a theoretical and experiential approach to group processes. Relevant empirical research is considered. Various models of group intervention are utilized. Emphasis is placed on understanding and applying knowledge of group dynamics to everyday life.

Soc 342 MODERN CORRECTIONS 3-0-3 (c)

An overview of the origins, processes, organization and contemporary trends of corrections for juveniles and adults will be undertaken. Current issues and alternatives to correctional policies will also be examined carefully.

Soc 344 PROBLEMS OF THE AGING 3-0-3 (c)

The course utilizes the systems approach in the study of several interrelated problem areas of the aged: physiological, psychological, social, and nursing. Emphasis is placed on developing an awareness of community resources, i.e., in terms of agencies and personnel. The student is expected to do agency "volunteer" work as well as an individual case study.

Soc 347 TOPICS IN URBAN SOCIETY 3-0-3 (c)

A series of topics of importance in understanding the urban environment will be explored. These may vary from year to year but will cover such topics as urban land use; an analysis of the skills, methods, and policies that ultimately would result in a socially suitable urban community, and explorations of environmental perception.

Soc 371-380 SPECIAL TOPICS IN SOCIOLOGY 3-0-3 (c)

Readings and discussion of topical areas of sociology. Topics will be chosen in accord with the needs and interests of the participants.

Soc 460 DEPARTMENTAL SEMINAR 3-0-3 (c)

Readings and discussion of selected sociological subjects will be designed to integrate the student's understanding of the discipline. Occupational opportunities for sociology majors will be examined.

Soc 471 INTERNSHIP P.O.I. Variable credit (c)**Soc 481-490 INDEPENDENT STUDY IN SOCIOLOGY P.O.I. Variable credit (c)**

Soc 498-499 ADVANCED SEMINAR Variable credit (c)

Research in sociology under the close supervision of the instructor and in the context of peer discussion and criticism. A completed research experience is required. Prerequisites: Soc 310-311 and P.O.I.

ANTHROPOLOGY

The courses in anthropology offered by this department are designed to permit students of the College to acquire a fund of basic information about the principles of anthropology and an acquaintance with the diversity of world cultures.

AN 101 PHYSICAL ANTHROPOLOGY 3-0-3 (c)

An introductory course in the study of man, his place in nature, his biological development, racial differentiation and archeological history.

AN 102 CULTURAL ANTHROPOLOGY 3-0-3 (c)

An intensive introduction to cultural anthropology covering the nature of culture, methods and theories, and discussing characteristic features of the language, family life, rituals, and values of the world's peoples.

AN 307 PEOPLES AND CULTURES OF AFRICA 3-0-3 (c)

Ethnographic and cultural analysis of the folk background and contemporary customs of the peoples of Sub-Saharan Africa with special attention to the problems of culture change.

AN 308 PEOPLES AND CULTURES OF LATIN AMERICA 3-0-3 (c)

Ethnographic and cultural analysis of the folk background and contemporary customs of the peoples of Latin America with special attention to the problems of culture change.

AN 311 WORLD CULTURES 3-0-3 (c)

A survey of some of the peoples and cultures of the world from early times to the present, with emphasis on physical, cultural, linguistic, and demographic factors.

(c) Courses applicable to the General Education core requirements.

AN 371-380 SPECIAL TOPICS IN ANTHROPOLOGY (c)

Readings and discussion of topical areas in Anthropology. Topics will be chosen in accord with the needs and interests of the participants. Topics may include: Mexican Life, Archaeology of Mesoamerica, Sociocultural Change, and Students are encouraged to suggest topics for study. P.O.I.

SOCIAL WORK**SW 222 SOCIAL WELFARE AS A SOCIAL INSTITUTION 3-0-3**

An introduction to the social work major, this course explores the field of social welfare and the social work profession. Social welfare is studied from the historical, philosophic, and sociological perspectives. The profession of social work is viewed in the general human services context and specifically in various social service agencies. Prerequisite: Soc 101 (Fall)

SW 240 HUMAN SERVICE PROCESSES 3-0-3

This course has been designed as an introduction to professional helping skills that are developed within the context of understanding human behavior and focusing on the helper as a unique dynamic individual. The skills necessary to provide effective human service and the development of a professional helping relationship are elaborated within the context of social systems theory and the problem-solving approach. (Spring)

SW 325 SOCIAL WELFARE SYSTEMS I 3-0-3

This study of social welfare systems focuses on the community network of services to relieve community, family, and individual problems. The policies of various programs are examined in relation to social goals and values of the social work profession. Prerequisite: SW 222 (Spring)

SW 326 SOCIAL WELFARE SYSTEMS II 3-0-3

This study of social welfare systems focuses on national social welfare policies and the social service delivery system. Such social problems as poverty, insecurity, and inequality of opportunity are examined in relation to national economic, political, and social systems. Prerequisite: SW 325 (Summer Session at West Chester State College only)

SW 328 URBAN SOCIAL WELFARE SYSTEMS 3-0-3

This course is designed to provide the students with an on-site study of a major urban area with emphasis on the urban social service delivery system as it relates to urban social problems. The similarities and differences between the urban situation and the small town-rural area are developed. (Offered during May only)

SW345 METHODS OF SOCIAL WORK I 3-0-3

This course focuses on the social work model of the helping process, with particular emphasis on the generic theoretical processes of change. Prerequisite: SW 222 (Fall)

SW 346 METHODS OF SOCIAL WORK II 3-0-3

This course focuses on the social work model of the helping process, with particular emphasis on differential treatment modalities. Prerequisite: SW 345 (Summer Session at West Chester State College only)

SW 351 SOCIAL WORK RESEARCH 3-0-3

A basic course in social work research designed to give the student the ability to understand current research in the field and to apply knowledge through the course project. Prerequisites: Ma 151, SW 222 (Spring)

SW 360 INTRODUCTORY FIELD EXPERIENCE 1-12-3

For the student who has not had volunteer human service work this will be an opportunity to engage in "helping" activities during a summer session. The student will be able to begin focusing on social work practice and discover his own potentialities for the profession. (The student may be exempted from this with the approval of fifty hours of volunteer human service experience.) Prerequisite: SW 222

SW 471-72 SOCIAL WORK FIELD EXPERIENCE 14 credits

An intensive educationally guided placement in a social service agency for actual social work experience. It requires two days of experience weekly for one academic year (beginning in the Fall plus a one hour seminar meeting each week, or five days per week for one fourteen week semester (Fall, Spring, or Summer) with a weekly seminar. Taken on a P-NP basis. Prerequisite: P.O.I.

SW 498 SENIOR SEMINAR 3-0-3

This course will be geared toward integrating knowledge gained in social work, the courses in psycho-social foundations, and research methodology. A research proposal will be developed with emphasis directed toward social work practice in a specific field. Prerequisite: P.O.I.



GENERAL STUDIES

The program in General Studies exists to 1) assist students to achieve a level of competency in the basic skill areas (mathematics, reading, writing) necessary to successfully compete in college level courses and 2) to provide support services (tutoring, counseling, study skills) to students in regular courses. A few students who enter college each year exhibit one or more deficiencies in the basic skills and as a result need the services provided through the General Studies program.

The General Studies program has two basic components: 1) instructional and 2) support services. Instruction is provided in mathematics, reading, writing and study skills. Support services are provided through peer and professional tutoring, individual and group counseling.

A maximum of six credits may be earned in General Studies courses. These credits may apply toward graduation but do not apply toward core or major requirements.

The College actively seeks a limited number of students who ordinarily will not meet existing admission criteria but who show potential and who with skill development and support services may succeed in college. No student may elect to participate in the program for credit unless eligibility is established under currently existing selection criteria. Questions of eligibility should be referred to the Director of General Studies.

The following courses are provided through the General Studies program to eligible students.

GS001 HUMAN POTENTIAL SEMINAR 2-0-1

The Human Potential Seminar is a small group experience that aims to provide a structure within which persons can generate and share extensive positive information about themselves. The seminar activities of mutual and self-affirmation introduce participants to a greater awareness of, and respect for, their own and others' potentials. Specifically, seminar participants are able to list extensively and in detail their values, satisfying experiences, personal strengths, and future life goals.

GS011 INTERMEDIATE ALGEBRA 3-0-2

A study of the fundamental arithmetic and algebraic skills prerequisite to college-level mathematics and science courses.

GS021 WRITING 3-0-2

A study of the basic skills of writing—grammar, usage, mechanics—which are prerequisite to college-level writing and literature courses.

GE031 READING AND STUDY SKILLS 0-2-1

Individualized instruction in reading improvement and study skills are provided in a laboratory setting. A wide selection of materials affords the student opportunity to achieve a solid base for expanding and adapting a thorough-going system of study to meet individual needs.

Registration for these courses is by permission of the Director of General Studies only.



INTERDISCIPLINARY MAJORS AND AREAS OF CONCENTRATION

MEDICAL TECHNOLOGY MAJOR

(See Chemistry for detailed program)

Students preparing for this vocation need to complete a minimum of 100 semester hours in college and pursue a 12 month period of study in an approved hospital. For those students who desire a broader liberal arts background, the student has the option of spending a fourth year on campus and earning the B.S. prior to entering the clinical year.

FORESTRY AND ENVIRONMENTAL MANAGEMENT MAJORS

Elizabethtown College offers a cooperative interdisciplinary program with Duke University. Following successful completion of three years at Elizabethtown and two years at Duke, the student is awarded a Master of Forestry or Master of Environmental Management from the School of Forestry and Environmental Studies, Duke University. The student also receives a B.S. degree from Elizabethtown upon successful completion of 128 credit hours.

A student has three program options: he may concentrate in the area of Biology, Business or Political Science. A total of 18-24 hours in the area of concentration and a combined total of 18 hours in the other two areas are required for each of the three options.

In order for the student to be accepted into the program at Duke, he must have completed the General Education Core for the B.S. degree and 36-42 semester hours in a combination of Biology, Business and Political Science. In addition, the student must have at least a 2.8 point average and the recommendation of the College.

For further details on the program, contact Mr. Laughlin or the Department Chairman in the area of the student's choice.

COMPREHENSIVE SOCIAL SCIENCE MAJOR

This program is more comprehensive than the usual departmental major in that while it permits students to complete a major area in one of the social sciences it also develops a complementary background in two or three other areas of social sciences. The

following are the areas in which one may specialize or do complementary work within the comprehensive program: history, political science, sociology, economics, and psychology. Please refer to the specific departmental requirements for the major and minor areas. Designed to operate on two tracks, the Social Science Comprehensive Major suits the needs of students with different goals, as follows:

I. For the prospective social studies teacher.

This program is designed specifically for social studies teacher education and leads to a Bachelor of Science degree. The intent is to supply a prospective teacher in the social sciences with as complete a background as possible to teach in the public school system while still developing a major.

1. Structure of major includes 24 hours in the major,* 12 hours in each of three minors, and 6 hours of geography.
2. Structure of education component includes Ed 215, 305, 472, and the requirements of the General Education Core as specified by the College.

II. For those interested in an interdisciplinary approach.

This program is designed for those who, while not planning to teach, find the wider interdisciplinary approach to working within several social science areas appealing. It also leads to a Bachelor of Science. The requirements, which include a 24 hour major and two 15 hour minors, leave plenty of opportunity for electives. The student electing this major will be expected to become conversant enough with three social science disciplines to propose an interdisciplinary solution to an important social science problem. This capability will be demonstrated in his senior year when he fulfills a project (usually a major research paper) under the direction of a project director.

1. Structure of major includes 24 hours in the major, 15 hours in each of two minors, 3 hours each in the other two social sciences, 6 hours in statistics and/or computer science, the 3 hour senior seminar in social sciences, and the requirements of the General Education Core as specified by the College.

*If history is not the major area of concentration (24 hours), then it must be one of the 12-hour minor areas.

GENERAL SCIENCE CERTIFICATION

Elizabethtown College offers a secondary education certification program in general science. This program is designed to lead to a general science teaching certificate in secondary education with a major concentration in one of the areas of science. The program is established to develop a more comprehensive background for teachers in order that they may be more qualified to teach science in the general science curricula of junior high and middle school programs. Following are the areas in which one may specialize within the comprehensive program: biology, chemistry, earth science, and physics. Please refer to the specific departments

for the selection of courses necessary to complete requirements for the area of major concentration.

Following is the structure of the program: the major area of science concentration requires a minimum of 24 hours; three 8-hour minors (Bio 103, 104; Ch 101, 102, ES 111, 107 or 108; Phy 112, 211 for biology and earth science concentration or Phy 132, 231 for chemistry concentration); eight to 12 hours in mathematics (Ma 101, 121 or Ma 117, 118 for biology; Ma 101, 121 for earth science; Ma 101, 121, 122 for chemistry and physics); and Ed 371, History of Science.

The educational component requires: Psy 105, Ed 215, Ed 225D, Ed 225E, Ed 305, Ed 371, and Ed 472.



PROFESSIONAL AND PRE-PROFESSIONAL CURRICULA

Business

The Department of Business offers programs in Business Administration and Accounting. See the description under Business Department for information.

Engineering

In cooperation with the Pennsylvania State University, Elizabethtown College offers a curriculum leading to an engineering degree. See the description under Physics Department.

Forestry

Elizabethtown College offers a cooperative five and one-half year program with Duke University which leads to a B.S. degree from Elizabethtown and an M.F. or M.S. degree in Forestry from Duke University. The student's program at Duke may be in Forest Management, Forest Protection or Natural Resource Ecology and Environmental Management. See interdisciplinary majors.

Forestry and Environmental Management Majors

For further information, see interdisciplinary majors and areas of concentration.

The Healing Arts

Pre-Dental, Pre-Medical, Pre-Osteopathy, Pre-Pharmacy, Pre-Veterinarian.

Most individuals wishing to enter one of the healing arts will find it desirable to major in biology, chemistry, or psychology. Students not majoring in one of the sciences should plan a strong background of electives in science as a very important part of the pre-professional program. The program should be structured in consultation with the major department.

Health Care Management

For students interested in administrative work related to health care institutions or agencies, students may select a concentration of courses in health care management listed in the catalog with the offerings of the Department of Business.

Medical Secretarial Science

The College offers an Associate of Science degree in Medical Secretarial Science. Specific requirements for the program are listed with the course offerings of the Department of Business.

Medical Technology

The Department of Chemistry offers programs in Medical Technology. See the description under Chemistry Department for information. Students majoring in medical technology at Elizabethtown College are not required to have their transcript evaluated by National Accrediting Agency for Clinical Laboratory Sciences before entering the clinical phase of their program. This exemption by NAACLS from the transcript evaluation requirement does not imply any approval or accreditation of the medical technology curriculum in this institution.

Music Therapy

Elizabethtown College offers a program to prepare students to enter the profession of Music Therapy. Music Therapy is the process by which the elements of musical experience are applied in a purposive and systematic way to establish, improve, or modify specific emotional, mental, social, and physical responses essential to the individual's realization of his fullest human potential. The Music Therapist may find employment in a variety of facilities.

Specific information about the program is included with the course offerings of the Music Department.

Pre-legal

The College recommends that the student who plans to enter the legal profession should follow a course leading to one of several majors. Among these might be Business, Economics, History, Political Science, or Philosophy. This will make possible the election of courses in many areas.

Persons wishing to enter law school should become familiar with the admissions requirements of the schools in which study is projected and plan a course of undergraduate study accordingly. Information may be obtained from the pre-law adviser, Dr. Wayne A. Selcher.

Pre-Ministerial

Those who are preparing for the ministry should investigate the entrance requirements of the seminary in which they plan to secure their professional training. Majors in many different areas will prepare a student for admission to most theological schools. Such are the demands on the present-day clergyman that there are few subjects in the curriculum that would not contribute to his efficiency, and he should seek as broad a background as possible. Students interested in the professional ministry may wish to discuss that concern with the College Minister.

Pre-Nursing

The college offers two years of study which will enable the student to transfer directly to Widener's College of Nursing located at Chester, Penna.

This is a baccalaureate nursing program and has received full accreditation by the National League for Nursing.

We are not affiliated with nursing programs other than Widener. However, students may elect to transfer to other institutions with similar programs.

Persons interested in this program should consult with Dr. Robert Heckman of the Department of Biology.

Social Work

Elizabethtown College offers a complete program in social work designed to meet the requirements of the Council on Social Work. (Accreditation is presently pending.)

Completion of this major will allow a student to qualify for entry-level social work positions after graduation as well as prepare him for entrance into a graduate school of social work for professional training. For a more complete description of this major, see the Department of Sociology.

OFF CAMPUS STUDY*Programs of Undergraduate Study in Germany, France and Spain*

The six colleges associated with the Church of the Brethren are cooperating in a junior year of study in Germany, France and Spain. Students may study at Phillips-Universitat, Marburg/Lahn, West Germany, at the University of Strasbourg, France, and at the University of Barcelona, Spain. A wide selection of courses is offered in the social sciences and the humanities. Students are given intensive language instruction prior to the opening of the university semesters.

To qualify for this program, students must have completed the equivalent of the second year of German in college and have approximately a B average. Although this is also the normal competency expected in French and Spanish, students who have completed the first year of college French or Spanish are accepted if they have outstanding recommendations. Other qualifications include seriousness of purpose, good character, demonstrated potential for social adjustment, and a basic understanding of the United States and the host country. A faculty adviser is in residence in Europe during the year.

The program accommodates about twenty-five students at Marburg and about the same number at Strasbourg and Barcelona. Elizabethtown College has a quota of about three or four for each university. The interested student should confer with Dr. J. Kenneth Kreider, BCA Program Coordinator, and work closely with his major adviser.

University of Ghana and University of the Americas

Elizabethtown College has programs of study abroad at the University of Ghana (Accra), and the University of the Americas (Puebla, Mexico). English is the language of instruction at the University of Ghana, while the University of the Americas uses both Spanish and English. Further information on Ghana may be obtained from Dr. Bela Vassady and on Mexico from Professor Bruce Lehr.

Cooperative Education Program

Elizabethtown College has a program in Cooperative Education involving many of the academic departments. Students involved in cooperative education combine their formal classroom training with planned and coordinated practical work experiences in their field of interest. The work experiences may be in business, industry, government, and/or service-related situations.

Academic credit and compensation for the non-classroom aspects of the program vary according to the nature of the assignment. The employment periods are structured, supervised, and evaluated by the College. Scheduling of the formal and nonclassroom portions of the program may follow a variety of patterns.

Students interested in pursuing a program in cooperative education are advised to contact the Director of Cooperative Education and the Chairman of the academic department involved.

Merrill-Palmer Institute

The Merrill Palmer Institute of Human Development located in Detroit, Michigan, has approved Elizabethtown College as a cooperating institution in its undergraduate program in the behavioral sciences.

The Merrill-Palmer Institute, founded in 1920, is a nondegree granting institution of higher education. Its program includes teaching, research, and community services. The coeducational body is composed of both graduates and under-graduates from colleges and universities throughout the United States and abroad.

The focus of the Merrill-Palmer program is on the study of children, families, and urban communities and involves a strong clinical or experiential component. In addition to pursuing advanced theory courses, the Merrill-Palmer under-graduate aids in conducting research and has the opportunity to meet and work with some of the outstanding individuals in the field of behavioral sciences.

To be eligible, the student should be entering their junior or senior year and may enroll at Merrill-Palmer for the fall semester or any quarter. Although students are encouraged to enroll for the academic year, a shorter program may be selected. Credits earned during this time will be accepted at Elizabethtown upon the student's return.

Although the program is intended primarily for students in the behavioral sciences, other students having an interest will be considered. Further information may be obtained from the Chairman, Department of Psychology.

Center for Community Education

Elizabethtown College considers educational service to the community to be one of its primary roles in meeting the varied needs of today's citizen. In accomplishing this role, Elizabethtown College has the following goals for its continuing education program.

1. To provide degree and certificate programs for adults, who are unable to pursue the traditional study at the College, through the various divisions of the Center for Community Education. Degree and certificate programs are offered in the fields specifically programmed by an individual on the basis of a planned objective. This program may include traditional course work, in-house studies, standard examinations such as CLEP, CPEP, APE, REDP, and USAFI, specially prepared examinations, evaluation of internships and other achievements which may be weighted in terms of attainment towards a degree or a certificate of accomplishment.
2. To provide opportunities for adults to pursue studies for personal growth and professional improvement which may or may not lead to given levels or recognized academic goals. These opportunities allow adults to enhance their intellectual growth, aesthetic enjoyment, creative activity and to increase their understanding of changing personal relationships thus making them wiser consumers, more effective workers, better family members and more responsible citizens.
3. To provide opportunities for individuals to continue their professional education and development beyond and apart from the academic degrees by providing continuing educational services to business, the church, labor, government and the professions, through various seminars, conferences, and institutes.

The above goals are implemented through the following segments of the Center for Community Education:

1. The Evening School and the University Center at Harrisburg through which the more traditional course work can be obtained to achieve the levels warranting the recognition of degrees and certificates of completion.
2. The Campus Free Division through which the individual goals of a person are evaluated, a satisfactory program prepared to meet these goals, and the options open are limited only by the initiative of the person in pursuing the program submitted and approved.
3. The Community Relations Division offers seminars, workshops, and other learning programs to meet the needs of business, industry, and government through the Industrial Relations Institute and to meet the needs of the health care industry through the Health Care Institute.

ACADEMIC INFORMATION

The College admits as regular students those who desire a Bachelor of Arts, Bachelor of Science, or Associate of Science degree program. A limited number of special students may also be enrolled.

The Student's Program

Each student must accept the responsibility to be familiar with the catalog materials and in consultation with his academic adviser he should carefully prepare his program.

The entering freshman is admitted into the College. The work of the first two years is selected to a large extent to ensure a foundation in general studies and enable the student to select a major wisely.

In most curricula a wide range of electives is offered in the junior and senior years. The student will take the prescribed courses outlined for each year. The College is not responsible to arrange the scheduling of courses out of sequence. To change from one curriculum to another, the student must consult with a member of the counseling staff.

Since the completion of 128 semester hours of work is required for a degree, a student's program must include an average of 16 semester hours for each of eight semesters to graduate in four years. Many students, however, wisely elect to take a lighter academic load in order to do better work. In these cases most students choose to attend a summer session or a part of a fifth year. A student with average grades may carry up to 18 semester hours of work in any given semester except summer session, when the maximum is 14 semester hours.

A student who has achieved a cumulative quality point-credit ratio of 3.00 or above may carry up to 20 semester hours credit in a semester or 16 semester hours credit in a summer session. For each semester hour above 18 for which a student is enrolled in a given semester, an additional fee is charged and approval by the Dean of the Faculty is required.

Any student taking twelve hours or more of credit per semester at Elizabethtown College is considered a full-time student and will pay full tuition and fees. Any student taking 11 hours or less per semester will pay the regular semester hour rate, plus applicable fees. He will receive a library card entitling him to full use of the library facilities. In a summer session a full-time student is one carrying a minimum of eight semester hours divided into the two terms. Tuition and fees are paid according to the schedule in the summer sessions brochure.

The student's class standing is determined on the basis of the number of credits he has earned. After earning 30 credits, he is considered a sophomore; with 60 credits he is a junior; with 90 credits he is a senior.

Registration

Students are required to register for classes on those days designated on the college calendar. Students registering later than the days specified will be charged a late registration fee of ten dollars. A student may register as either a "regular" or "non-degree" student and as full-time or part-time. Only a regular student is a degree candidate and must be in an approved program. A non-degree student or a special student (see definition under "Academic Probation") is not a degree candidate.

A student registers for courses—not time or professor. No guarantee is stated or implied that a student will get every course at the time requested.

Change of Registration

Courses may be added within the first week of a semester and may be dropped without academic penalty during the first four weeks. Withdrawal from a class must be approved by the academic adviser and completed through the Registrar's Office.

Credits, Grades, and Quality Points

Credit is indicated in terms of the semester hour. Each semester hour unit signifies work completed in one 50-minute recitation or two or more 50-minute lab periods per week for a semester of 15 to 18 weeks or in an equivalent learning experience.

Grades are reported for work as follows: A, excellent; B, good; C, satisfactory; D, poor; F, failing; W, withdrawal, with the grades earned at the time of withdrawal from class; I, work incomplete. All grades of I, must be removed by April 1 for those received in the Fall semester; and by October 1 for those received in the Spring semester or Summer Session. Failure to do so results in a grade of F being recorded.

Quality points are given for credits as follows: for a grade of A,

4 per semester hour; B, 3 per semester hour; C, 2 per semester hour; D, 1 per semester hour; F, P, and NP, no quality points.

1. Credits earned at another institution while under the jurisdiction of Elizabethtown College, and as part of a program approved by Elizabethtown College, are considered on-campus credits. The credits, grades, and quality points are calculated into the student's average.
2. The student's rank in class at graduation is based on the credits, grades, and quality points earned at Elizabethtown College.
3. Ordinarily a student may not repeat a course in which he has earned a grade of D. However, on the request of the student's adviser, and the approval of the department chairman, a student may repeat a course in his major department, or a course required by the major.
4. When a course is repeated, the latter grade is final and is used in calculation of the semester and cumulative averages.

Academic Probation

Academic probation means that a student is in danger of being dismissed from the College for academic reasons.

If, after the student has completed between one and 18 semester hours in college, he has a cumulative quality point ratio below 1.50, or after completing 19 to 36 semester hours, below 1.80, or after completing 37 to 54 semester hours below 1.90, or after 55 to 72 semester hours below 1.95, or after completing 73, or more hours below 2.00, he is placed on *academic probation*. Academic probation is not retroactive to include the semester when probationary status was obtained.

It is recommended that a student who is on academic probation limit his load to four courses or 13 semester hours whichever is less in any semester in which the probation exists. The summer maximum should be two courses per term.

A student on academic probation encountering consistent or severe academic difficulty may be reclassified as a "special student" by the Committee on Academic Standing. In this instance a special student shall mean that he is not progressing satisfactorily toward the completion of his degree. As a nondegree candidate, a special student will not be able to participate in extracurricular activities or to represent the College in activities off campus effective the beginning of the semester in which he is placed on that status. These activities will include, but are not limited to, intercollegiate athletics, drama, forensics, groups representing the College off campus, student newspaper, radio station, etc.

A special student will lose his eligibility for financial assistance. The Office of the Registrar will automatically review

the course work taken by the student and recommend his admission to regular standing at the College upon achieving a 2.0 cumulative quality point average. There is no guarantee that courses taken by the student during this period would be applicable to the degree upon achieving a 2.0 average. In this instance nondegree students will be limited to a load of four courses or thirteen semester hours, whichever is less.

College housing will be available to "special" students on a space-available basis after all regular degree candidates have received their room assignments.

Academic Dismissal

During the first two years of college, a student may be dismissed for academic reasons after two successive semesters of academic probation. During the last two years of college a student may be dismissed for academic reasons after one semester on academic probation.

A student on academic probation may be requested to withdraw from the college any time the Administration (upon recommendation from the Academic Standing Committee) so decides, after consideration of his overall situation.

A student who is either in academic difficulty or who is on academic probation may be requested by the Academic Standing Committee, in consultation with the student and advisors, to enroll in a special or particular program and/or to become involved in testing, counselling, or other developmental activities. Satisfactory performance by the student in such assignments may be interpreted by the Academic Standing Committee as "satisfactory progress" and may make it unnecessary for the Committee to discharge a student even though the above number of semesters on probation has accumulated.

Graduation Requirements

To receive a B.A. or B.S. degree from Elizabethtown College, the student must earn 128 semester hours credit, or in the case of engineering, medical technology, and other special programs the number indicated in the course outline, including all of the specific courses indicated, the general education core requirements, and, the requirements for his major field.

To receive an A.S. degree with a major in Medical Secretarial Science, the student must earn a minimum of 64 credits including 28 credits of general education courses, 6 credits of free electives, and the specific courses required in and by the major.

Requirements will be governed by the catalog and the

Program Guide Book issued by the Registrar dated four years prior to a student's graduation (two years in the case of associate degree students), or by the catalog in effect at the time of graduation, if the student so chooses.

Transfer students are subject to the requirements of the catalog in effect at the time they begin studies at Elizabethtown College. Students coming from two-year institutions may, if they desire, be governed by the catalog dated four years prior to graduation if they can present positive evidence that they planned to transfer to Elizabethtown College when they matriculated at the two-year college.

In order for the student to meet graduation requirements, he must earn a minimum of thirty semester hours credit in classes on the Elizabethtown College campus. These thirty credits must be from the last sixty credits, with a minimum of 15 of these credits in the major department.

Elizabethtown College will graduate only those students who have met the moral and financial obligations incurred while they have been in pursuit of their college courses. The completion of the required number of semester hours does not in itself constitute eligibility for graduation.

The Office of the President must be notified by anyone who plans to be graduated in absentia.

It is the responsibility of the candidate for a degree in December, May, or August to make formal application for the degree in writing by September 15, February 15, and March 15 respectively to the Registrar.

In order to be eligible for graduation, students must have a credit quality point ratio of at least 2.00 and a minimum average of 2.00 in the major. Students transferring from other colleges must have a ratio of at least 2.00 in courses pursued in residence at Elizabethtown College.

Dean's List and Graduation with Honors

A student having earned a quality point-credit ratio of 3.50 or above is regarded by the College as having performed with distinction.

Students earning a 3.50 or better quality point ratio in any given semester are placed on the Dean's List of Honor Students.

At the time of his graduation, a student who has achieved a cumulative quality point-credit ratio of 3.50 will be graduated cum laude; with a ratio of 3.75 his honor will be magna cum laude; with a ratio of 3.90, he will receive summa cum laude.

A transfer student will receive honors if he has earned a minimum 60 semester hours credit at Elizabethtown College, if he is recommended for honors by the major department, and if his average meets the requirements.

Scholar's Privilege

Any student who appeared on the Dean's Honor List during the preceding semester, may, with the permission of the instructor, attend any class in the College as a scholar's privilege without registration or credit.

Departmental Student Privilege

Any junior or senior student may, with the permission of the instructor, attend any class within his major department.

Credit by Examination

A regularly admitted student may request to be examined for credit over most catalog courses. Not included are practicum, internship, or research courses. The student must present an authorization form from the Registrar's Office (stamped by the Business Office) to the faculty member before the examination.

The faculty member may assist the student by giving a syllabus of the course and other recommendations. The examination will be comprehensive in nature and may take any form that the faculty member chooses. A fee is charged.

The result of the test should be reported immediately to the Registrar's Office.

Class Attendance

At the beginning of each course, the professor indicates his absence policies to the students in his classes. Excessive absence and tardiness are handled by the professor. A student may be dismissed from a course for excessive absences by the professor. The Academic Standing Committee may hear an appeal from the student with power to reinstate him in class.

The College attitude toward class absence is that the academically superior student should be allowed some flexibility in class attendance, and the academically inferior student should be under more rigid class attendance demands. It is the responsibility of each student to attend classes regularly and punctually. Absences caused by ill health and other personal problems should be cared for directly with the professor. Absences due to College sponsored activities are to be communicated by the educator in charge directly to the appropriate faculty and staff. However, it is

the sole responsibility of the student to make the necessary arrangements with his professor at the beginning of the semester for class absences due to previously scheduled college sponsored activities. Difficulties necessitating appeal are dealt with by the Dean of the Faculty.

Unless previous arrangements are agreed to between a student and his professor, the student who is absent when an examination is given must secure permission from his instructor in order to take the examination. For a make-up examination which he is permitted to take, he will be charged \$2.00 per semester hour except in the case of final examinations for which he will be charged \$3.00 per semester hour.

Auditing Courses

A full-time student may elect to audit a course at no charge. He may not preempt a regularly enrolled student. The requirements for the audit will be determined by the professor in consultation with the student. A student may not change a course registration to audit after the end of the fourth week of the semester.

Full-time students enrolled in remedial courses for no credit are charged no fee.

Independent Study

The College recognizes the advantages of learning situations other than that of the traditional classroom. In addition to special off-campus programs such as internships, one may also elect independent study in certain instances.

Independent Study shall be undertaken for the purpose of special investigation of a topic or to academically benefit the advanced student in a special learning situation not attainable in regular catalog offerings. It should not be used simply to assemble credits for graduation. Application for an independent study involves making a preliminary definition of the topic or issue to be pursued. In the case of an interdisciplinary study, not only the permission of one's own professor but also of a professor in the second department is necessary. The faculty member or members sponsoring the Independent Study will be involved in planning and evaluating the project, but the student should be capable of independent work. Independent Study is not tied to the academic calendar and a project may be begun or ended at any point. It is to be registered with the Registrar at the beginning of the semester during which it shall be completed.

Application forms for Independent Study are available at the Registrar's Office.

Directed Study

Directed Study is a second type of study available to matriculated students at Elizabethtown College. In contrast to independent study of a special topic, a Directed Study will be for a regular catalog course which is not a part of the course offerings for the given semester. This method of study should be used by the student who needs rather frequent conferences with the professor.

Currently a full-time student shall be charged \$40 per credit hour for the study in addition to his regular tuition. Part-time students, or students whose load exceeds 18 hours shall be charged the current part-time rate.

It is the responsibility of the student to locate the professor who has the background to teach the course and is willing to enter into the agreement. Registration for these studies is initiated in the Registrar's Office.

Tutorial Courses

Tutorials are available where remedial work is necessary, such that the student cannot profit from a classroom course or from one of the above methods of study. A tutorial involves more frequent meetings between professor and student than either Independent or Directed Study. Generally a faculty member will not teach more than one tutorial per semester.

Any student who enters into a tutorial agreement, currently shall be charged at the rate of \$110 per credit hour. This fee is charged over and above his regular tuition.

It is the responsibility of the student to locate the professor who is willing to enter into the tutorial agreement. Registration for these studies is initiated in the Registrar's Office.

SEVERANCE FROM COLLEGE

Non-Voluntary Severance

The College reserves the right to sever the relationship of a student with the College for academic reasons, social reasons, or a combination of the two, after the procedures of the College in such matters have been completed.

Voluntary Withdrawal

Withdrawal from the College is initiated through the Counseling Center. For purposes of billing, room reservation and academic responsibility, the effective date of withdrawal will be the date of return of the completed official notice to the Counseling Center. A student who withdraws without notification will receive no refund and may incur full room penalty. Failure to comply with withdrawal procedures may result in loss of: 1) the privilege of readmission to the College; 2) the right to clear transcript of credits.

Leave of Absence

A student may take a leave of absence from the college to attend one of a number of cooperative educational programs. These would include the BCA program, attendance at the University of Ghana, a semester of a year at the Merrill-Palmer Institute, etc.

A leave is initiated by contacting the faculty coordinator or director of the appropriate program. The leave is approved upon the student's acceptance into the program.

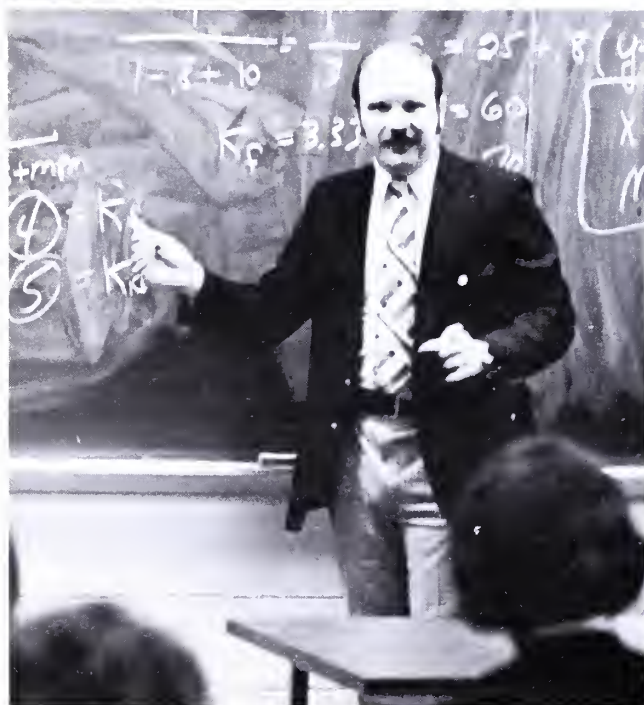
Pre-registration information will be sent to students on leave approximately by March 15. The pre-registration card, plus a \$100 deposit must be returned to the Registrar's Office by May 1 to ensure a place in the student body and in the selected courses.

Leaves of Absence for academic reasons requires that the student apply no later than the pre-registration period of the semester prior to the one in which the leave begins. Any administration fees for off campus programs are payable at the time of application for the leave.

ENDOWED FUNDS

Outstanding achievement in a number of areas of study is recognized each year by awarding of prizes by individuals, organizations, and corporations. These prizes include the following: Royer Bible Prize, Weaver Biology Prize, Butterbaugh Chemistry Prize, J. W. Kettering Accounting Prize, Raffensperger Journalism Prize, Dr. John R. Gregg Memorial Award, Pennsylvania Institute of Certified Public Accounting Award, Wall Street Journal Award, Rufus P. Bucher, Jr. Award for Courage, James H. Duff Forensics Award, Weaver Medical Technology Award, Larry H. Reber Physics Award, Ben Hess History Award, A. Stauffer Curry Christian Service Award, Schlosser Shakespeare Award, Christian S. Wenger English Award, SAM Award, Engle Business Equipment Typing Award, Tait Business Department Endowment Fund, Hollinger-Kilheffner Memorial Award, Clair R. McCullough Athletic Award, John Frederick Steinman Teaching Award, and the Emma C. Landes Esperanto Award.





Finances

ANNUAL EXPENSES

The expenses for the year are covered by a comprehensive fee, which for resident students includes tuition, furnished room, board (cafeteria closes after the noon meal on the day of closing of any school vacation, holiday, or semester break and reopens for the evening meal the day before classes start); use of library, student center, gymnasium, and athletic field, admission to all athletic games on the campus, admission to community cultural programs, subscription to the Etownian and Conestogan, and limited use of the Infirmary (resident students only.)

For commuting students the comprehensive fee covers the above except furnished room, board and limited use of the Infirmary.

The circular entitled "Annual Expenses" sets forth the detailed costs for a given year.

ALL CHARGES ARE payable prior to registration each term. Credit allowed for College scholarships, grant-in-aid, matriculation or pre-registration deposits will be deducted from the invoice. To be eligible for College aid, a student must be full time.

ALL FEES ARE SUBJECT TO CHANGE WITHOUT NOTICE AND ANY NEW OR SPECIAL PROGRAM FEES SHOULD BE AS QUOTED IN WRITING FROM THE BUSINESS MANAGER.

Absence and Sickness

A student who is absent from College because of sickness, or for any other reason, and retains his place in class, pays in full during his absence.

Withdrawal

Withdrawal from the College is initiated in writing through the Counseling Center. For purposes of billing, room reservation and academic responsibility, the effective date of withdrawal will be the date of return of the completed official notice to the Counseling Center. A student who withdraws without notification will receive no refund and may incur full room penalty. Failure to comply with withdrawal procedures may result in loss of: 1) the privilege of readmission to the College; 2) the right to clear transcript of credits. Refunds for a withdrawal due to serious illness or dismissal will be prorated to the date of withdrawal.

If withdrawal occurs between July 1 and a date three weeks prior to fall registration, the resident student is liable for \$100. If the withdrawal occurs within the three weeks prior to the day of registration in either semester, the resident student is liable for \$150, plus the applicable deposit. If the withdrawal occurs after the beginning of

the semester, the student is obligated for a full semester's room charge, actual board used to the date of withdrawal, plus 25% of the unused portion and tuition as follows:

<i>Period of Attendance*</i>	<i>Per Cent of Semester's Charge</i>
First Week	25%
Second through Third weeks	50%
Beginning of the Fourth week	100%

Change of Status

The above withdrawal policy is also in force when changing credit hours and/or room and board status.

General Expense Information

Two transcripts of credits will be provided free for all students while in regular attendance. A charge of one dollar per copy will be made for all other transcripts of credit. No transcripts of credit are furnished to students whose accounts are not paid in full.

A fee of \$15.00 must accompany the application for admission. This fee covers the cost of processing the prospective student's application, is non-refundable, and cannot be applied toward the payment of other charges.

A successful applicant should send to the Director of Admissions, Elizabethtown College, a matriculation deposit of \$100.00 within 30 days after receiving his letter of acceptance. This deposit reserves space in class and a room for boarding students. It will be credited to the student's account when he matriculates. The fee is not refundable, except that \$50.00 will be returned in event of withdrawal prior to February 15.

A pre-registration deposit amounting to \$100.00 is required of all matriculated students planning to return to college. The pre-registration deposit for the following year is payable at the time a student pre-registers for the fall semester. It is applicable to the first semester's account and is not refundable.

A graduation fee of \$10.00 is charged each candidate for a degree. Cap, gown, and hood rental is paid upon placing an order.

Checks should be made payable to Elizabethtown College.

Tuition and Fees for Medical Technology Students

There is an administrative charge of 10% of Elizabethtown College's tuition costs to the medical technology students entering their clinical year. It is understood that these students will pay the hospital any charges directly related to the intern year in addition to the above 10% administrative fee.

*The first day of registration counts as the beginning of College.

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1978

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1978 Wormleysburg, Pennsylvania
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6-7-75 Wallingford, Pennsylvania
Department of Surgery, Philadelphia College of
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Harrisburg, Pennsylvania *Terry L. Bush*
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M.Ed., D.D. (1978)

Baltimore, Maryland
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The Johns Hopkins Hospital

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Paradise, Pennsylvania

Attorney (retired)

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MARTHA A. FARVER	Associate Director of Personnel

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E. MARGARET GABEL, M.S.	Head Cataloguer and Assistant to the Director
VIRGINIA K. CHRISTOPHER, M.L.S.	Reader's Service Librarian
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ADJUNCT FACULTY IN MEDICAL TECHNOLOGY

- BEN HARRIMAN at Harrisburg Polyclinic Hospital
M.D., Jefferson Medical College
- WILLIAM V. MCDONNELL at West Jersey Hospital,
Voorhees, New Jersey
M.D., Jefferson Medical College
- WARD M. O'DONNELL at Lancaster General Hospital
M.D., Georgetown Medical School
- WILLIAM UMIKER at St. Joseph's Hospital, Lancaster
M.D., State University of New York at Buffalo
- JOHN P. WHITELY at York Hospital
M.D., Temple University School of Medicine

ADJUNCT FACULTY IN MUSIC

WESLEY FISHER

String Bass Artist-Teacher, Mohnton, Pennsylvania

ADJUNCT FACULTY IN MUSIC THERAPY

DIANE D. GARDNER at Hamburg State School and Hospital

M.A., Texas Women's University; R.M.T.

NANCY THIEDE at Philhaven Hospital, Lebanon

B.M. in Music Therapy, Florida State University; R.M.T.

ADJUNCT FACULTY IN OCCUPATIONAL THERAPY

MARGARET E. ALEXANDER at Harrisburg Community Mental Health Center

Certificate in Occupational Therapy, University of Pennsylvania; O.T.R.

B. JOAN BELLMAN at District of Columbia General Hospital

B.S., Virginia Commonwealth University; O.T.R.

PHYLLIS E. BREUNINGER at Coatesville Veterans Administration Hospital

Certificate in Occupational Therapy, University of Pennsylvania; O.T.R.

ALISA CHAZANI at South Beach Psychiatric Center, Staten Island, New York

B.S., M.S., New York University; O.T.R.

JOANNE M. DILEO at Good Shepherd Home, Allentown

B.S., Temple University; O.T.R.

GLENDIA J. DOUGHERTY at St. Joseph's Hospital, Lancaster

B.S., Virginia Commonwealth University; O.T.R.

ELDON D. ENVOLDSON at Reading Institute of Rehabilitation

B.S., Loma Linda University; O.T.R.

MARGARET E. FATULA at Pennhurst State School and Hospital, Spring City

B.A., Dickinson College; O.T.R.

KATHRYN J. GEARHART at Gnaden Huetten Memorial Hospital, Leighton

B.S., Western Michigan University; O.T.R.

KAROLE GIBSON at Selinsgrove State School and Hospital

B.S., Virginia Commonwealth University; O.T.R.

PAULA GOLDSTEIN at St. Vincent's Hospital, New York City

B.S., M.S., New York University; O.T.R.

MICHAEL D. GOODLING at Harrisburg Polyclinic Hospital

B.S., University of Illinois; O.T.R.

HANNA GRUEN at St. Margaret Memorial Hospital, Pittsburgh

B.S., Ohio State University; O.T.R.

ANNIE C. HICKS, at Horizon House, Philadelphia

B.A., Paris University; B.F.A., Moore College of Art; M.Ed., Temple University.

CHRISTINE L. HISCHMANN at Intercommunity Action, Philadelphia

B.S., Temple University; O.T.R.

SHIRLEY A. KREISER at Veterans Administration Hospital, Lebanon

B.S., M.A., Columbia University; O.T.R.

ANNE A. KUNTZVANISH at Greater Southeast Community Hospital, Washington, D.C.

B.S., Washington University; O.T.R.

DONNA LUCKE at The Sheppard and Enoch Pratt Hospital, Towson, Maryland

B.A., College of St. Catherine; O.T.R.

DONALD L. MAUD at Veterans Administration Hospital, Lebanon

B.S., Ohio State University; O.T.R.

BERNICE B. MOSS at Veterans Administration Hospital, Philadelphia

B.S., University of Pennsylvania; O.T.R.

CLAUDIA B. NORTON at Howard University Health Science Center

B.S., University of Wisconsin; O.T.R.

ARNOLD A. ONDIS at Morris Hall Health and Rehabilitation Center, Lawrenceville, New Jersey

B.S., University of Florida; O.T.R.

MARY A. PAGETT at Sinai Hospital of Baltimore, Inc.

B.S., University of Kansas; O.T.R.

SUSAN C. PARKER at Delaware House, Burlington, New Jersey

B.S., Virginia Commonwealth University; O.T.R.

GAIL A. RICHERT at Option-Day Treatment Center, Lancaster

B.S., University of Pennsylvania; O.T.R.

DHUN G. SHARMA at Temple University Hospital

B.S., New York University; O.T.R.

BARBARA A. SMITH at Harmarville Rehabilitation Center, Pittsburgh

B.S., Ohio State University; O.T.R.

ELINOR ANNE SPENCER at Eastern Maine Medical Center, Bangor, Maine

Certificate in Occupational Therapy, University of Pennsylvania; O.T.R.

JOHANNA H. TEACHMEN at Pioneer Center, Pittsburgh

B.A., Mt. Holyoke College; O.T.R.

MARY TEETER at Reading Hospital

B.S., University of New Hampshire; O.T.R.

ERNESTINE R. WHITING at Veterans Administration Hospital, Coatesville

B.S., Cornell University; O.T.R.

WILMA J. WIENER at Norristown State Hospital

B.A., University of Pennsylvania; O.T.R.

PARA-PROFESSIONAL PERSONNEL

Baum, Beverly A., B.S.
Laboratory Assistant in Chemistry

Hartley, Gloria R., M.L.S.
Library Assistant

Heim, Roger A., B.S.
Para-professional in Instructional Services

Hoffman, Deborah, B.S.
Project Assistant, Biology Department

Knouse, Alice L., B.S.
Para-professional in Business

Miller, Elizabeth A., B.S.
Library Assistant in Charge of Circulation

*Part-time

ADMINISTRATIVE STAFF

Bierman, Suzette L., B.A.
Admissions Recruiter

Burkins, Jr., Jay J.
Heating, Air Conditioning, and Ventilating Mechanic

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Admissions Recruiter

Craighead, Esta E.
Administrative Assistant in Department of Education

Garner, Nevin O.
Programmer, Data Processing Center

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Accountant, Business Office

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Chief Accountant

Houff, Dawn S., B.A.
Advisor/Counselor in Office of Registrar

Hughes, Diane S.
Computer Operator

Kaltreider, Carol A., R.N.
Staff Nurse

Kroesen, Howard A., B.S.
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Long, Mildred F.
Para-professional, Departments of Sociology and Political Science

March, Patricia A.
Assistant to Director of Housing

*Moore, Patricia A., R.N.
Staff Nurse

Morton, Jane, B.S.
Admissions Recruiter

*Offerman, John T., B.A.
Admissions Recruiter (Temporary)

Robertson, Linda S., B.S.
Admissions Recruiter

Wolgemuth, Nancy L., R.N.
Staff Nurse

*Part-time

OFFICE PERSONNEL

Bagri, Barbara Thome
Secretary, Occupational Therapy (Temporary)

Beck, Jean D.
Secretary to Dean of the Faculty

Bigham, Elizabeth M.
Secretary in Career Planning and Placement Office

Boltz, Shirley A.
Payroll Clerk

- Conklin, Gail R.
Secretary, Department of Food Service
- Dalton, Josephine D.
Secretary to Director of Financial Aid
- Fultz, Helen E.
Secretary to Dean of Student Affairs
- *Gaw, H. Jeanette
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- **Gehret, Melinda M.
Secretary, Occupational Therapy
- *Gibbons, Joyce A.
Secretary, Secretarial Services
- Good, Lois N. B.
Clerk, Duplicating Services
- Good, Mary C.
Clerk, Bookstore
- *Griffith, Kathleen K.
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- *Groff, Judith A.
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- Hamilton, Dorothy N.
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Cash Receipts Clerk
- Hossler, Helen A.
Purchasing Clerk
- *Howell, Ellen W.
Typist, Admissions Office
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- *Jones, E. Frances
Clerk, Secretarial Services
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- Loser, Linda D.
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Secretary to Director of Admissions
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Secretary, Secretarial Services
- Miller, Karen D.
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Secretary, Secretarial Services
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- Raber, Sarah Jane
Secretary to Director of Athletics
- Rathsam, Patricia F.
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- Reed, Dorothy G.
*Secretary to Director of Career Planning and Placement and
Director of Cooperative Education*
- *Rhen, Grace E.
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Personnel*

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*Seward, Dolores
Clerk, Library

Shaneor, Sara Ann
Secretary to Director of Alumni Relations

Sikorski, Stella M.
Secretary to Director of Student Activities and Area Coordinators

*Singer, Gladys M.
Secretary to Director of Religious Activities and Church Relations

Snively, Freeda B.
Switchboard Operator/Receptionist

Snyder, Kathy E.
Secretary, Development Office

Snyder, Yolanda K.
Secretary/Clerk, Instructional Services

*Steinhart, Norma
Secretary to Director, Community Relations Division

Waser, Janet I.
Key Punch Supervisor

Weidman, Donna K.
Clerk, Secretarial Services

*Wolverton, Geraldine R.
Secretary, Secretarial Services

*Part-time

**Leave of Absence, 11/12/76 to 9/1/77



CAMPUS DIRECTORY

Persons seeking information about Elizabethtown College or particular programs of the College are invited to direct correspondence or telephone calls as indicated below.

All correspondence should be addressed to Elizabethtown College, Elizabethtown, Pennsylvania 17022.

To telephone, call 717-367-1151. Ask the switchboard operator to dial the office you indicate.

Academic Matters	Dean of the Faculty Alpha Hall
Admissions of Students	Director of Admissions Alpha Hall
Alumni Activities	Director of Alumni Relations Alpha Hall
Business Matters	Treasurer Alpha Hall
Center for Community Education	Director of CCE Alpha Hall
Conference Facilities	Director of Conference Services Alpha Hall
Cooperative Education Program	Director, Cooperative Education Alpha Hall
Evening Studies	Registrar Alpha Hall
Financial Assistance for Students	Director of Financial Aid Alpha Hall
General Information	Director of Public Affairs Alpha Hall
Gifts or Bequests	Director of Development Alpha Hall
Housing of Students	Director of Housing Baugher Student Center
Intercollegiate Athletics	Director of Athletics Baugher Student Center
Placement Services	Director of Placement and Career Guidance Alpha Hall
Summer Session	Registrar Alpha Hall

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Elizabethtown College



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Correspondence Directory

Elizabethtown College
Elizabethtown, Pennsylvania 17022
717/367-1151

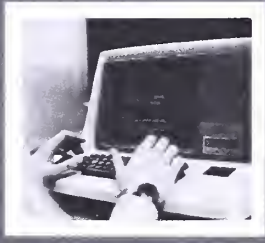
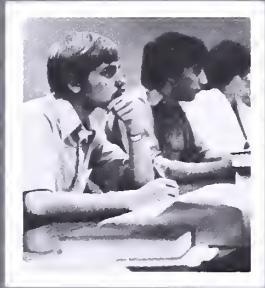
<i>Office</i>	<i>Building</i>	<i>Telephone Extension</i>
Office of Admissions Kevin J. Manning, <i>Director</i>	Alpha Hall	161
Office of Athletics John M. Tulley, <i>Director</i>	Thompson Gymnasium	137
Office of Business Affairs	Alpha Hall	218
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Office of Continuing Education J. Henry Long, <i>Associate Dean</i>	Nicarry Hall	291
Office of the Dean of Faculty Bruce L. Wilson, <i>Dean</i>	Alpha Hall	187
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17022

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ELIZABETHTOWN, PA. 17022

Elizabethtown College is accredited by the Middle States Association of Colleges and Secondary Schools.

Students are to be governed by the policies and provisions contained in this catalog, subject to the right of the trustees, administration, and faculty to repeal, change, or amend them at any time.

Elizabethtown College is in compliance with the requirements of Title VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and all other applicable, federal, state, and local statutes, ordinances, and regulations. Elizabethtown does not engage in illegal discrimination against students, prospective students, employees, or prospective employees on the basis of race, color, religion, ethnic or national origin, personal handicap, age, or sex.

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Calendar 1979-80

FALL SEMESTER

Aug. 27-31	Faculty Meetings and Orientation
Sept. 1	Freshmen Arrive
Sept. 4 (A.M.)	Upperclassmen Arrive
Sept. 4 (P.M.)	Registration
Sept. 5	Classes Begin 8:00 a.m.
Sept. 5	President's Convocation
Sept. 29	Homecoming
Oct. 24	Midterm
Oct. 26-28	Fall Recess
Oct. 29	Classes Resume 8:00 a.m.
Nov. 21	Thanksgiving Recess Begins 10:00 p.m.
Nov. 26	Classes Resume 8:00 a.m.
Dec. 14	Classes End
Dec. 15	Reading Day
Dec. 17-22	Final Exams

SPRING SEMESTER

Jan. 10-11	Faculty Meetings and In-Service Programs
Jan. 14	Classes Begin 8:00 a.m.
Feb. 29	Midterm
Feb. 29	Spring Recess Begins 5:00 p.m.
March 10	Classes Resume 8:00 a.m.
Apr. 3	Easter Recess Begins 10:00 p.m.
Apr. 8	Classes Resume 8:00 a.m.
Apr. 29	Classes of Wednesday, April 30, Meet
Apr. 29	Classes End 5:00 p.m.
Apr. 30	Reading Day
May 1-7	Final Exams
May 10	Commencement

SUMMER SESSIONS

May 12-May 30	Summer Session I
June 9-July 11	Summer Session II
July 4	No Classes
July 14-Aug. 14	Summer Session III

AUGUST

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Calendar 1980-81

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Sept. 2 (A.M.)	Upperclassmen Arrive
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Sept. 3	Classes Begin 8:00 a.m.
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Oct. 17-19	Fall Recess
Oct. 20	Classes Resume 8:00 a.m.
Oct. 22	Midterm
Oct. 25	Homecoming Day
Nov. 26	Thanksgiving Recess Begins 5:00 p.m.
Dec. 1	Classes Resume 8:00 a.m.
Dec. 12	Classes End 5:00 p.m.
Dec. 13	Reading Day
Dec. 15-20	Final Exams

SPRING SEMESTER

Jan. 8-9	Faculty Meetings and In-Service Programs
Jan. 12	Classes Begin 8:00 a.m.
Feb. 27	Midterm
March 6	Spring Recess Begins 5:00 p.m.
March 16	Classes Resume 8:00 a.m.
Apr. 16	Easter Recess Begins 10:00 p.m.
Apr. 21	Classes Resume 8:00 a.m.
Apr. 28	Classes of Wednesday, April 29, Meet
Apr. 28	Classes End 5:00 p.m.
Apr. 29	Reading Day
Apr. 30-May 6	Final Exams
May 9	Commencement

SUMMER SESSIONS

May 11-May 29	Summer Session I
June 8-July 10	Summer Session II
July 3	No Classes
July 13-Aug. 13	Summer Session III

AUGUST

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JULY

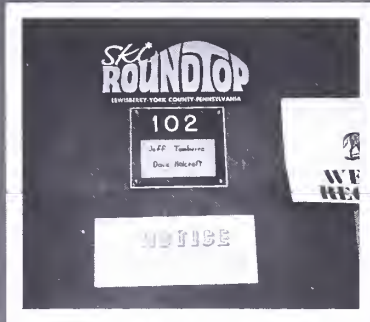
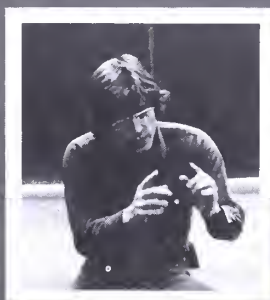
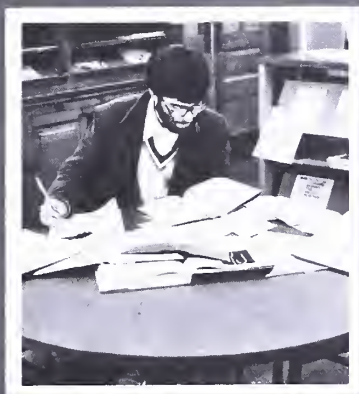
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Statement of Purpose

The purpose of Elizabethtown College has historically been expressed in the phrase, "Educate for service." The College provides an education which should enable the student to develop as an intelligent and moral citizen who can be a productive member of society. The College affirms a relationship between those academic disciplines which primarily prepare students with the mental skills and specialized knowledge to undertake successful personal careers in business, industry, and the professions; and those disciplines which primarily foster the knowledge of cultural heritage, the ability to communicate effectively, the capacity for long-term and continuous self-education for reflective moral and spiritual powers of mind, and for a deep sense of personal integrity. Ideally, Elizabethtown College graduates should be able to serve themselves and others freely and responsibly in an environment characterized by social, cultural, ethical, spiritual, and physical uncertainties. The College seeks to foster that balanced pragmatic mixture of professional and humanistic studies that has historically characterized liberally educated men and women.

The achievement of ideal balance of curricular studies for undergraduate students depends upon diversity of intellectual enquiry and outlook by both teachers and students within the disciplines represented in its curriculum, and upon variety of responsible expression of scholarly opinion. The College welcomes a mixture of students of varied ages, backgrounds, traditions, interests and needs, as these can be accommodated within the existing curriculum. It commits itself to fostering excellence in educational achievement and to strengthening intellectual curiosity.

an overview of Elizabethtown College





a place to live, to learn, to launch a career

Clearly, it is important that as a prospective student you should become aware of the academic policies and regulations of the College, along with the curricula and course descriptions, the costs and admissions policies, and all the other facts that this catalog contains.

However, it is equally important that you begin to think about the *place* that is Elizabethtown College. Any place in which for over 80 years men and women have gathered to live and to study in community must have its own special atmosphere. Certainly Elizabethtown does. Broadly, this atmosphere arises from the excellence and the human concern of its professors, the quality of the students and of the life they share, the learning which is nourished here, and the lives and careers which that learning in turn begets.

However, a still more particular description of the College seems in order, and the "overview" which follows is an attempt to describe to you this place in which so many students have lived, learned, and launched their careers.

A PLACE TO LIVE

In 1899 students and faculty first joined together to form the academic community that is Elizabethtown College. Since that time they have committed themselves to an educational philosophy which asserts the union of all aspects of college life. Life outside the classroom—for both students and faculty—should be as challenging and rewarding as the studying that goes on within. For both of these aspects of college life comprise *learning*, that journey of self-discovery and self-realization which leads a man to know himself as completely as he can—in his relations with himself, his fellow men, his god.

To begin to know yourself completely you must have as complete an experience of living as you can. This experience is extremely important if, like most entering freshmen, you look forward to college as your first chance to stand on your own, to look critically about you, to make informed decisions and individual com-

mitments. In exploring this independence you will want a college that offers you every opportunity to find your own way—and kind—of life. Elizabethtown offers you this opportunity.

A pleasant environment

The grounds of the College are quietly conducive to life in and out of the classroom. If there are formal aspects of the college landscape—terraced playing fields, wide lawns, a lovely dell which rises to groves of trees among which sit many of the College's academic buildings, there are also places where one can quietly wander alone—in the woods and thickets which are reclaiming the old quarry on the grounds, beside the small pond where students often read, fish, and doze in the warmer months (and skate in the winter), or out into the countryside which surrounds the town.

For the countryside is beautiful. To the east, Lancaster County is a region of well-kept and remarkably fertile farmland, while nearby to the west of the College rise the Appalachian mountains, where students often hike in the spring and autumn, and ski in the winter. The Borough of Elizabethtown itself is very small—some 8,000 people—and, naturally, offers many points of contrast, pro and con, to larger cities. Fortunately however, you do not have to choose. On the one hand you can enjoy the attractive qualities of life in a small town—a fairly relaxed pace of life, a quietly cordial atmosphere, the ready accessibility of all areas of town to the College ("downtown" is an easy walk of several blocks). On the other hand, Hershey, a resort and recreational center popular with students, is just 15 minutes from campus, and the cities of Lancaster, Harrisburg, and York are all 30 minutes away.

Within this area cultural resources are ample, if naturally less varied and rich than a big city might afford. The College supports a good calendar of cultural events—concerts, recitals, lectures, film series. Harrisburg and Hershey each support symphony orchestras, and in the summer there is a very fine music and drama festival in Mount Gretna, a few miles to the north. Lancaster is quite properly proud of its



Fulton Opera House, a richly restored 19th-century theater which offers a wide array of cultural events in dance, drama, and music. Further afield, Philadelphia and Baltimore are within an hour and a half of the campus, New York and Washington within three. In short, you are by no means isolated at Elizabethtown.

A chance to express yourself

Elizabethtown not only offers you the chance to enjoy cultural offerings both on and off the campus, it also gives you ample opportunity to discover, explore, and develop your own interests and abilities. You can involve yourself in a wide variety of activities, from acting in plays to writing them, from playing music to playing chess, in scuba diving, spelunking, fencing, and photography, and in many other student organizations in which your interests and talents can have full rein.

Many organizations and groups speak to more serious interests. You can join an organization that reinforces your academic program—like the Accounting Club, the Supreme Fiction Society, the local chapter of the American Chemical Society. A number of religious groups offer fellowship and worship in exploring corporate and individual spiritual concerns. In other organizations students give their time and energies in volunteer community service.

Name your interest, and in all probability there is a student organization that reflects it. If not, and if you can find enough like-minded students, the College encourages you to start a new group.

Another very important part of student life at Elizabethtown is the athletic program. The College is well equipped to serve most physical fitness programs. Students and faculty frequently use the gymnasium and the student center—swimming, bowling, jogging, playing tennis or handball or racquetball, working out in the weightroom, and so on. Whether you want to spend part of an afternoon shooting basketball with a few friends or follow your own schedule of physical conditioning, the College encourages you, firmly believing in the old maxim, *mens sana in corpore sano*—a healthy mind in a healthy body.

In addition to individual sports programs, the College fields men's varsity teams in baseball, basketball, soccer, tennis, and wrestling; women's varsity teams in basketball, field hockey, softball, tennis, and volleyball; and

coed varsity track and swimming teams. The College's intramural leagues—for men, women, and coed—give you a chance to compete against teams from other residence halls, from other clubs, and from the faculty in flag football, soccer, volleyball, basketball, bowling, softball, paddleball, and tennis.

Helping and being helped

Volunteer work in the community is an important part of college life for many students. They help in a wide range of community services, from working in hospitals to fighting community fires with the volunteer fire company, from tutoring children with reading disabilities to assisting in local churches. This concern is one sure sign that students think of the Borough of Elizabethtown as *their* community, and want to make a personal commitment to it.

In turn, should you need help, the College stands ready to assist you. Your faculty advisor or, indeed, any member of the faculty can offer you academic counseling, from helping you plan your program of study to suggesting tutoring or remedial work, or advanced study. Should you decide to go on to graduate or professional school, members of the faculty will help you in the important process of graduate school selection and admissions.

If you have personal concerns, the Center for Counseling and Student Development is an excellent source of help. Another is the College chaplain, a minister of the Church of the Brethren who also offers spiritual counsel. If you would feel more at home with a member of your own faith, the chaplain will put you in touch with a local minister, priest, or rabbi.

For routine medical problems, the College maintains an infirmary with a 24-hour nursing staff. A modern health center with X-ray and laboratory facilities is five minutes from campus, and in case of emergency or serious illness the Hershey Medical Center (the hospital and medical school of The Pennsylvania State University) is only 15 minutes away.



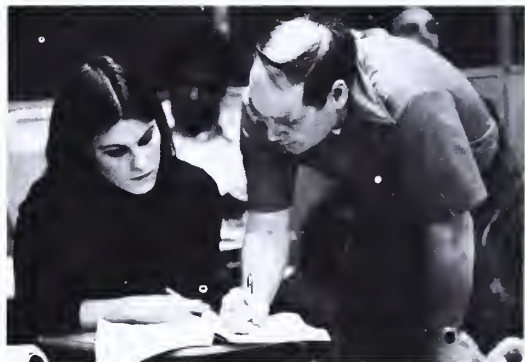
Full citizenship in the college community

As a member of the college community, you will enjoy more independence than you have probably ever had before. Not only will you be making important decisions about the direction of your own life, you will also share responsibility for the well-being of the larger academic community. At Elizabethtown students join the faculty and administration in both the privileges and the duties of citizenship in the College.

Most students live on campus in one of the residence communities—groups of two or three residence halls. You can become actively involved in the governance of your residence community, planning activities for all residents to share, establishing rules that will protect individual rights and make the community a more pleasant place to live, and determining disciplinary measures for violations.

In the larger community, the College as a whole, you can be just as actively involved. Students play a major part in planning all-campus events—from the cultural series to rock concerts to benefit dance-a-thons. Instead of having "just another student government association," the College elects students to the Community Congress, the Residence Hall Council, the Campus Life Council, and other college-wide governance and policy-making committees. In short, at Elizabethtown you will have opportunities to test both your leadership skills and your organizational abilities, and to make your voice heard in deciding policies that will set the future course of the College.

Nor is your status as a full member of the academic community merely a matter of governmental organization. It is also reflected in a college social life in which faculty and students meet to enjoy shared interests. Professors join in student activities—not necessarily as leaders, but simply because they enjoy hiking or painting scenery. You in turn will join in faculty activities—not as a student, but as a friend and guest. Thus the old gulf between student and teacher narrows, bridged by a sense of shared commitment to an academic community in which all members join together to live and to learn.





A PLACE TO LEARN

Learning and living are synonymous—and nowhere is this clearer than in Elizabethtown's classrooms. A college education is an adventure in which you explore the frontiers of the universe, the inner workings of the human brain, the day-to-day lives of people who lived thousands of years ago, the fascinating symmetries (and similarities!) of mathematics and music, rat colonies and human crowds, the structure of the atom and the solar system. It is an education designed to open your mind to limitless possibilities, by giving you:

Individual attention

At Elizabethtown, education is not an assembly-line, mass-produced commodity, but a personal journey in which you seek answers to the needs, abilities, and interests that make you who you are. Just as independence in the college community accords both privileges and responsibilities, so this kind of individual education encourages your maturity in the classroom. For if an individual education means that professors must know you well so that they can direct their teaching specifically to you, it also means that you must responsibly participate in your own education—for it is your journey.

Elizabethtown strives to provide an individual education by keeping its classes small and informal. The student faculty ratio is 14:1, and many classes are even smaller, especially in your junior and senior years. The College recognizes that learning comprises two fundamental tasks—the absorption of a given body of skills and factual information, and the ability of the mind flexibly and subtly to interpret this information, integrating it with the mind's own experience of itself and of the world. Accordingly, lectures and discussion groups encourage you to probe, analyze, to speak up, challenge others' opinions, and defend your own. Intelligent disagreement, both with fellow students and with the professor, both in class and afterwards, is always encouraged.



An exceptional faculty

Out of class discussions with professors are commonplace at Elizabethtown. The College's instructors have a commitment to helping you on a one-on-one basis, whether challenging you to do incisive independent study, inviting you to help in their own research, or seeing you through a rough spot in a course. Elizabethtown professors' interest in you is personal, and it does not end when the class bell rings—which is one of the reasons they were asked to teach at the College.

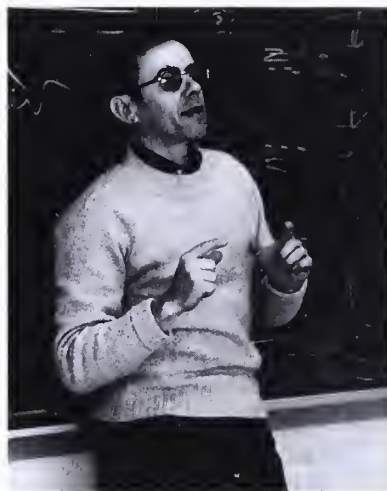
Of course, the faculty also possesses the recognized professional qualifications; most of them hold the highest earned degree in their fields, and many are doing research that will lead to the publication of books and scholarly articles. However, the College insists on going beyond formal credentials to find professors who can excite you about their subjects, who will value your contributions to the class as greatly as you value theirs, who can challenge you to become what you would be.

Modern facilities and equipment

Perhaps the point of greatest interest to a prospective student at Elizabethtown is the library. The library holdings comprise 135,000 bound volumes; over 665 periodicals; 1,830 art slides; 5,184 records, 317 tapes, and 2,150 musical scores; and more than 3,930 microforms. The library features open stacks for research, large reading rooms, small study rooms, and individual study carrels.

The science departments have an impressive array of sophisticated equipment, some of which is usually found only at much larger institutions. The College's large PDP/DEC-10 computer has terminals with 24-hour access throughout the campus plus micro- and mini-computers with interface capabilities. The College has television and radio studios; art studios and photography darkrooms; music practice rooms, practice instruments, and playback equipment facilities for plays and concerts.

Every academic facility on campus has been either renovated or built since 1957. Each department occupies a separate area or building. Classrooms, laboratories, studios, special library collections, faculty offices, and departmental lounges are grouped conveniently together with plenty of space for both faculty and student needs. Consequently, you and your professor can settle a point quickly because the references are close at hand, or you can set up complex laboratory experiments without worrying that other classes will disturb them.



A curriculum that meets your needs

During your first two years at Elizabethtown, you will concentrate on courses that fulfill the General Education Core requirement, a schedule of courses in literature, modern languages, the fine arts, religion and philosophy, history, social science, mathematics, science, and physical education. The resulting broad general knowledge of many fields is good in itself, for certainly no one can claim to be well-educated without it, and it also gives you a chance to sample a full range of academic disciplines before you decide on your major. If like many freshmen you are still undecided when you enter college, this aspect of the General Education requirement will be of real benefit to you.

When you are ready to concentrate on a major field of study, Elizabethtown gives you the following choices:

Liberal arts majors

Biology	Modern Languages
Chemistry	French
Communication Arts	German
(Broadcasting,	Spanish
Journalism, Speech,	Music
Theatre)	Physics
Economics	Political Science
English	Psychology
History	Religion and Philosophy
Mathematics	Sociology

Career-oriented majors:

Business	Allied Health Professions
Accounting	Medical Technology
Business	Music Therapy
Administration	Occupational Therapy
Chemical	Associate degree:
Management	Medical Secretarial
Education	Science
Early Childhood	Social Work
Elementary	
Secondary	
Business	
Music	

Preprofessional programs:

Pre-law	Pre-pharmacy
Pre-medicine	Pre-veterinary medicine
Pre-dentistry	Pre-seminary
Pre-osteopathy	



In addition, there are cooperative programs with other colleges and universities in:

Engineering (Three years at Elizabethtown and two years at Pennsylvania State University resulting in two degrees);

Forestry (Three years at Elizabethtown and two years at Duke University, resulting in a bachelor's degree from Elizabethtown and a master's degree from Duke).

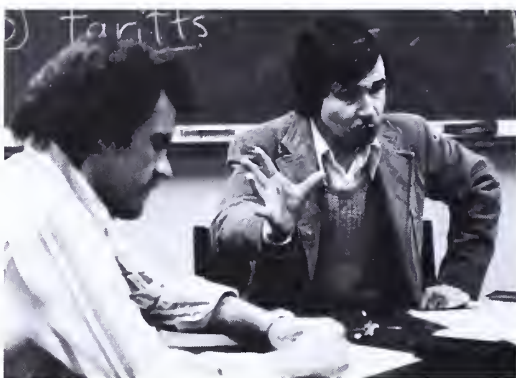
Special academic options

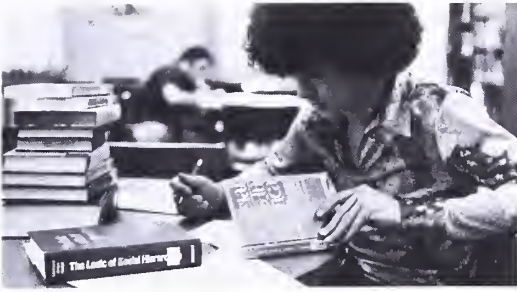
Once you have begun intensive study in your major field, you may well find yourself so interested in some aspect of it that you want to explore it more fully than regular coursework allows. Through *independent study*, you can pursue a project of your own for a semester or a year, researching it and writing a professional paper under the guidance of your faculty adviser. Independent study is especially worthwhile if you plan to go on to graduate school because it refines your skills in the research methodology required in graduate studies.

Another academic option, *directed study*, allows you to take a regular course during a semester in which it is not offered to the student body as a whole. Because the professor who teaches the course will instruct you individually, you are in effect a class of one. This option can be helpful if you have a tight schedule and find it difficult to take a course that you need or want when it is normally offered.

One popular option is *study abroad*, whereby you may spend a year or more studying in England, France, Germany, Spain, Africa, or Mexico. You need not be a language major to qualify for foreign study; students have gone abroad to study political science, educational systems, social service organizations, music, and so on.

Students in the behavioral sciences can spend a semester at the Merrill-Palmer Institute, an internationally-known educational institution in Detroit. Whether you choose a clinical or experiential program treating children or the family in an urban setting, you will work with some of the outstanding professionals in the behavioral field.





A PLACE TO LAUNCH A CAREER

One of the main reasons why you have decided to go to college is to prepare yourself for a career . . . even if you are not yet sure exactly what that career will be. This concern is natural and important, and you have every right to expect that the college you select will treat career planning and preparation as seriously as you do. At Elizabethtown we agree, and we offer:



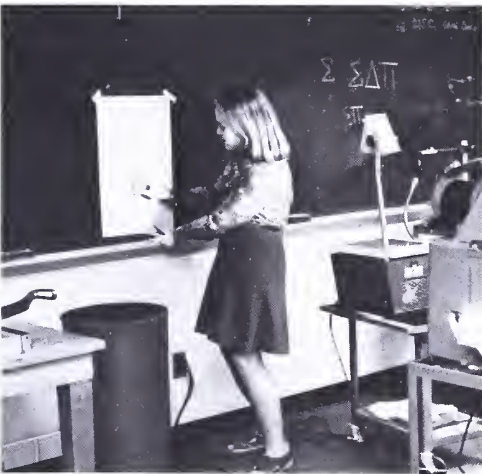
An invaluable liberal arts background

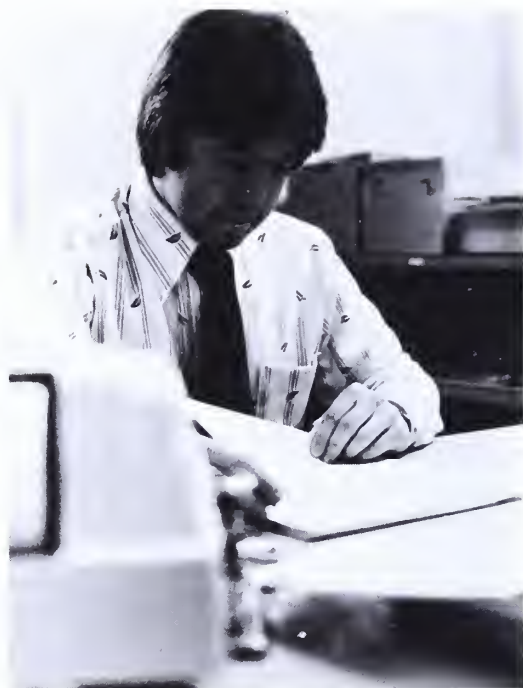
The General Education curriculum not only helps you to choose a career, it also seeks to provide you with the breadth and flexibility to change careers as the times change.

A narrow vocational education may qualify you for a specific entry-level position, but it does not provide what you need to move beyond that point. When companies consider you for promotion into positions of responsibility, they do not look for technical skill; instead they look for your ability to reason objectively, to solve problems, organize, and communicate effectively: which is to say, your ability to think. These are precisely the qualities that a broad intellectual training in the liberal arts will give you.

For careers change. A century ago carriage makers and railroad telegraphers were in great demand; today their skills are almost useless. The acceleration of technology means that the market for specific job skills changes at an ever faster pace, and it certainly makes little sense to spend all your college years preparing for a job that might become obsolete in a decade. It is estimated that today's college freshman will change *careers* (not jobs) five to seven times during his lifetime. Your program of study should anticipate *all* of those careers, not just the first one. A general liberal arts education will enable you to keep pace with change because it trains your mind to be flexible and to grasp new concepts.

People change, too. As you grow older, you may find that your interests take new directions; work which once challenged and fascinated you may come to seem like a straitjacket. Such growth is healthy and desirable, but it may be frustrating if you do not have the intellectual ability to discover and move towards a new and more fulfilling career.





Learning by experience

You should not, of course, neglect to prepare for your first career. Here, one of the finest learning processes is actual experience in your prospective field of work. Although classroom projects in many courses are based on situations you will meet on the job after graduation, the College can also offer you a more direct experience by placing you in work situations as part of your studies.

Field studies may involve work experience or observation—or a combination of the two. For example, in social work, the Urban Seminar will take you into a major metropolitan area where, for three weeks, you will undertake an on-site study of urban social problems as part of an evaluative comparison between urban and small town social welfare situations. In religion and philosophy, you may visit the major religious centers of the Eastern Seaboard to gain first-hand acquaintance with people who follow Hinduism, Buddhism, Taoism, Shinto, and other religions which are not common in this country. In economics, field trips to major financial centers enable you to see the applications of your studies in the workaday world.

Practicums and internships enable students to gain practical experience through working under the close supervision of a professional in

the field. In the past, accounting students worked with auditing firms; communication arts majors have taken jobs with radio or TV stations, or on newspapers like the Harrisburg *Patriot-News*; chemistry majors have worked in gas chromatography with the Mobil Oil Company. Internships run from several weeks to a semester or a summer. When work interns return to campus they write a detailed paper on what they have gained from the experience. Students earn academic credit for a practicum or internship; however, few of these experiences provide a salary.

Learning by experience can help you decide whether you are ready to make a commitment to a specific career. You might find that the job or the field is not for you, after all. However, that discovery is also valuable; because you are still in college, you have time to alter your career direction.

Career counseling and placement

As you get to know your professors, you will find that many of them have had work experiences far beyond teaching. But even if they have spent a lifetime in teaching, they are remarkably knowledgeable about the career and professional opportunities in their academic fields. At any time in your college life, they will be happy to sit down with you to discuss your career possibilities.



To supplement and complement the counsel of professors, the College maintains a Career Planning Office which will help you explore career options and settle on the right career for you. A sizable library of career publications provides the latest information about specific careers—everything from the projected number of job openings in a specific field to surveys of salaries at the entry level.

In your senior year, you will begin to think about your first job, and that probably will mean some visits to the Placement Office, where the Director not only maintains a list of current job openings and potential employers, but also provides counsel in writing resumes and effective methods to be used in job interviews. The process is successful: in one recent year, 92% of the students who registered with the Placement Office were placed. (Incidentally, the Placement Office also will help you if you are looking for a summer job, and the services of this office are open to alumni long after they have graduated from Elizabethtown.)

ENTERING ELIZABETHTOWN

If Elizabethtown sounds like your kind of college, your next question is whether you will be accepted for admission. Although that question cannot be answered fully until the Admissions Office sees your application forms and talks to you personally, you can arrive at a general idea of your chances. The College's admissions

policies are both competitive and selective, requiring:

- Completion of a college preparatory program in an accredited high school with standing in the upper half of your class.
- A recommendation from your high school principal, your guidance counselor, or both, attesting to your academic ability and your character.
- Scores on the Scholastic Aptitude Test.

No quality college education is inexpensive; in 1979–80 cost for tuition, room, and board is \$2,606 per semester for resident students; \$1,748 per semester for commuters. The College does, however, maintain an extensive financial aid program, with over 60% of the students receiving some form of assistance, usually in a package that combines grants, scholarships, loans, and on-campus jobs. If you think you will need financial help, the Office of Financial Aid would be happy to talk to you about it.

A catalog can give you some idea of what a college is like, but the best way to make your decision is to visit Elizabethtown. The Admissions Office will arrange a visit that matches your interests: sitting in on particular classes, talking informally with students, getting financial aid information, looking at the special equipment you will be working with in a year or two. The College welcomes the opportunity to become mutually acquainted.

ELIZABETHTOWN COLLEGE AT A GLANCE

The College: Elizabethtown is a four-year, co-educational college associated with the Church of the Brethren, offering a liberal arts education as well as preparation for specific careers. The College is located in Elizabethtown, a residential community in south central Pennsylvania, midway between Harrisburg and Lancaster.

Campus: The campus comprises 110 acres and 15 major buildings, all of which are new or renovated since 1957.

Students: There are about 1420 students, of which 1200 are resident students representing about 18 states and six foreign countries.

Accreditation: Elizabethtown is fully accredited by the Middle States Association of Colleges and Secondary Schools as well as by many professional associations.

Degrees Offered: The College offers the Bachelor of Arts, Bachelor of Science, Associate of Science, Bachelor of Professional Studies, and Bachelor of Liberal Arts degrees.

Fields of Study: A complete list of majors is provided on page 33 of this catalog.

Academic Options: Elizabethtown offers such optional academic opportunities as independent study and research, tutorials, directed study, field studies or internships in most departments, study abroad programs.

Faculty: The full-time faculty consists of 103 members, providing a student-faculty ratio of 14 to 1.

Library: The library has 135,000 bound volumes in open stacks, 665 periodicals, a large reading room, small study rooms, a music audition room, and collections of musical recordings, art slides, microforms.

Residence Halls: Diverse living arrangements are available within the six residence halls, which are equipped with lounges, color TVs, pianos, ping pong tables, vending machines, washers and dryers, kitchen facilities.

Student Clubs and Activities: Elizabethtown offers a wide range of different student activities, covering a range of academic, musical, dramatic, communications, and special interest opportunities. There is a strong, active student government.

Cultural and Recreational Activities: The College maintains a cultural program which brings to campus nationally known speakers, musical and theatrical groups, solo performers. The hub of recreational activities is the Baugher Student Center, which provides a swimming pool and bowling lanes as well as other recreational facilities. The proximity of the College to metropolitan centers of the Eastern Seaboard also makes countless cultural and recreational activities available.

Religious Life: Attendance is not required, but students of various faiths are encouraged to participate in on-campus and off-campus religious services.

Student Counseling Services: As needed, students are urged to take advantage of academic counseling, personal counseling, remedial academic and tutorial assistance, career counseling, job placement, graduate and professional school advisement, medical services.

Athletics: Elizabethtown fields NCAA intercollegiate teams for men in baseball, basketball, soccer, swimming, tennis, coed track, and wrestling. It fields NAIA women's teams in basketball, field hockey, softball, swimming, tennis, volleyball, and coed track. In addition, throughout the year there is an active intramural program for all students.

Costs (1979-1980): The 1979-1980 comprehensive fee (including tuition, room, board) is \$2,606 per semester for resident students. The fee for commuters (which does not include room and board) is \$1,748 per semester. Additional costs include books (about \$175 a year), personal expenses, personal transportation.

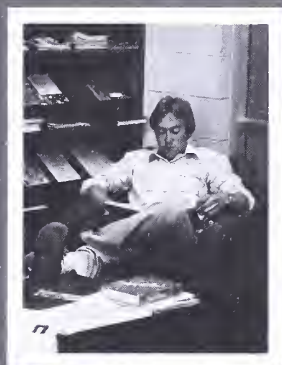
Financial Aid: The College offers a package of aid consisting of scholarship, grants, loans, and student employment. About 60% of all students receive some form of financial aid through the College.

Admission Plans: Elizabethtown offers a rolling admission plan, with each application considered as it is received. For outstanding high school juniors, there is an Early Admissions Plan. Qualified students who have attended an accredited two-year or four-year institution with at least a 2.0 average may apply for transfer to Elizabethtown.

Admissions Fees: There is a non-returnable \$15 fee which must accompany the application for admission. On acceptance, there is a \$100 acceptance fee, which is applied to the first year's tuition.

Campus Visit: Although a campus visit is not mandatory, it is strongly recommended.

Admissions



Admissions

ENTERING THE COLLEGE

Elizabethtown College seeks serious students who intend to apply themselves to the educational process. Interested students are urged to look closely at the College's varied academic offerings, its educational philosophy, and its physical facilities. Visits to campus are encouraged and may be arranged through the Office of Admissions.

The College reserves the right to admit students on a selective basis in order to maintain departments and majors of an effective size. Students are admitted without reference to race, color, creed, sex, or national origin. Students may be admitted under four admissions plans: regular, early, transfer, and special.

Regular Admissions Plan

Young men and women who are high school graduates and whose records indicate serious scholarship, good character, and satisfactory health are encouraged to apply for admission to Elizabethtown College. They should communicate with the Director of Admissions to obtain the proper application forms and any detailed information which may be required. The College evaluates applications using the following guidelines:

1. The student must be a graduate of a senior high school accredited by the regional accrediting agency or by the Department of Education of the state in which he lives.
2. The student's high school principal or guidance counselor must recommend admission both in regard to academic ability and to character.
3. The student must have completed the College Preparatory curriculum in his high school. However, the College may admit a student who has not completed such a course of study, but whom it deems qualified for entrance on the basis of test scores or other means of evaluation.

4. The student must take the Scholastic Aptitude Test administered by the College Entrance Examination Board (Box 592, Princeton, New Jersey 68540).
5. The student should visit the College for an on-campus interview. (While optional, an interview is strongly recommended.)
6. On being admitted to the College, the student shall file a physician's statement on a form provided by the College.

Advanced Placement Program (CEEB):

Elizabethtown College participates in the Advanced Placement Program of the College Entrance Examination Board. With the approval of the department concerned, the College will grant advanced placement and credit to students who score 3 or higher on the Advanced Placement Examination.

Early Admissions Plan

To enable superior high school students to move more quickly into their higher education, Elizabethtown College will allow carefully selected students to begin their college work immediately after completing the junior year in high school. Students enrolled under this program enter the College as regular freshmen; upon successful completion of the freshman year they are granted a high school diploma in addition to the college credits earned. This program has the full cooperation and support of the Pennsylvania Department of Education. All degree programs at the College are available to these selected students, who are expected to exhibit the mental and emotional maturity necessary to adjust to the general program of the College. Following enrollment, students receive close academic guidance by selected faculty members.

All applicants for the accelerated admissions program are carefully screened on a highly individualized basis. In addition to the fundamental requirement that students must have completed their eleventh year in an accredited high school program, the College gives acute attention to the following factors: mental ability, scholastic achievement, social and physical maturity, and personal motivation.

1. Students must rank in the upper percentiles of their high school class; furthermore, their performance on the Scholastic Aptitude Test is given weighty consideration.
2. The College accords great importance to the opinions and predictions of the student's high school principal and guidance counselor, and to those of the College's department chairman in the student's prospective major.
3. The written approval of the student's parents, high school principal, and guidance counselor is mandatory before the student can be accepted. In addition to the indicated statistical data, the selection process includes a conference with the student by the Director of Admissions.

Any student interested in applying for this accelerated program should first discuss the matter thoroughly with the high school guidance counselor and then write to the Director of Admissions at Elizabethtown College for an application form.

Transfer Admissions Plan

Elizabethtown College welcomes students who have been enrolled at two-year or four-year colleges.

Students, who, at the time of matriculation, are graduates of a degree granting, two-year college accredited by one of the six regional accrediting agencies will receive full junior standing and will be required to earn a minimum of 64 semester hours in order to graduate from Elizabethtown.

Students who transfer from an accredited two-year college without an associate degree may transfer a maximum of 64 hours of credit to Elizabethtown College. When the total number of transfer credits and credits earned at Elizabethtown College exceeds 59, placing the student in junior status, the student is not permitted to transfer additional credits from a junior college.

Students who have attended four-year colleges or universities accredited by one of the six regional accrediting agencies will be permitted to transfer previous academic credit; however, in order to meet graduation requirements, the student must earn a minimum of 30 semester hours credit in classes on the Elizabethtown College campus. These 30 credits must be included within the most recent 60 credits, and a minimum of 15 of the 30 credits must be in the major department.

College credits which are not transferred as a part of a completed degree program, which carry a grade of C or P or better from other accredited institutions, and which are acceptable toward a degree at Elizabethtown College may be transferred upon the approval of the Registrar. In any doubtful situations, the Registrar will consult with the Department Chairman and the Dean. Grades are not transferable; courses, however, may be transferred.

In addition to the six guidelines listed under the Regular Admission Plan, the prospective transfer student will need to present an official transcript indicating work completed at, and honorable dismissal from all colleges attended. The College will request recommendations from the dean of the college last attended. Students from non-accredited institutions should see the special admissions plan described below.

Special Admissions Plans

Transfer students from non-accredited colleges:

Students who have attended a non-accredited institution may wish to enroll at Elizabethtown. In cases in which the record is above average, the College may allow a student to validate this non-accredited work by passing more advanced courses at Elizabethtown. In such cases, Elizabethtown reserves the right to revise the evaluation after the equivalent of one semester's work at Elizabethtown College. Such students may also validate credit by passing the College Level Examination Program Tests upon the approval of the department concerned and the Dean of the Faculty.

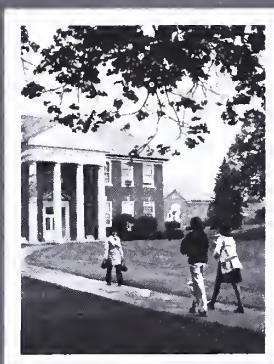
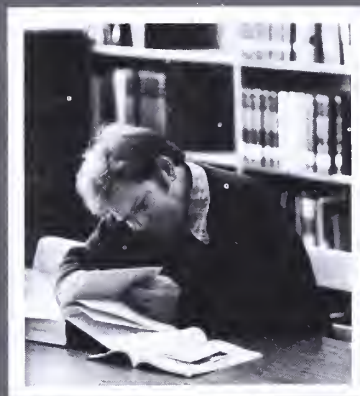
Continuing education for older adults:

Many adults continue after high school graduation with a broad reading program as well as other valid learning experiences. Credit for what they have learned in these less formal ways is available through testing. Elizabethtown College accepts up to two years of college credit from the College Level Examination Program Tests.

In some instances, adults are able to benefit from a college experience but lack the formal education to enter college under one of the three plans listed above. In those cases in which successful work or other experience indicates such strength, a student may be admitted as a special student on a trial basis.

In all special admissions cases, as many as possible of the principles listed under the Regular Admissions Plan will be followed. Full admission may be granted after completion of 15 hours of work with grades of C or better.

Cost and Financial Aid



Financial Information

Annual Expenses

The expenses for the year are covered by a comprehensive fee, which for resident students includes tuition, a furnished room, and board (the cafeteria closes after the noon meal on the day on which the College recesses for vacation, holiday, or semester break, and reopens for the evening meal the day before classes resume); use of the library, the student center, the gymnasium and athletic fields; admission to all athletic games on the campus, and to community cultural programs; subscriptions to *The Etownian* and the *Conestogan*, and limited use of the Infirmary (resident students only).

Detailed costs for Elizabethtown College may be found in the pamphlet, "Annual Expenses," available from the Business Office. Costs for the 1979-80 academic year follow:

	Resident Student	Commuter Student
Tuition and Fees	\$3,497	\$3,497
Room and Board	1,715	0
Books	175	175
Transportation	100	375
Personal Expenses	300	300
Lunches	0	250
Total	\$5,787	\$4,597

All charges are payable prior to registration each term. Credit allowed for College scholarships, grants-in-aid, matriculation or pre-registration deposits will be deducted from the invoice. To be eligible for college aid, a student must be enrolled full-time.

Absences and Sickness

A student who is absent from the College because of sickness, or for any other reason, and who retains his place in class, pays in full during his absence.

Withdrawal

Full-time students withdraw from the College through the Counseling Center; part-time students withdraw through the Registrar's Office. For purposes of billing, room reservation, and academic responsibility, the effective date of withdrawal will be the date on which the completed official notice is returned to the Counseling Center or the Registrar's Office. A student who withdraws without notification will receive no refund and may incur the full room penalty. Failure to comply with withdrawal procedures may result in loss of the privilege of re-admission to the College and the right to a clear transcript of credits earned.

If a resident student withdraws between July 1 and three weeks prior to fall registration, he is liable for \$100. If he withdraws within the three weeks prior to the day of registration in either semester, he is liable for \$150, plus the applicable deposit. If he withdraws after the beginning of the semester, the student is obligated to pay the full semester's room charge; the ac-

tual board used to the date of withdrawal, plus 25% of the unused board; the tuition on the basis of the following schedule (the first day of registration counts as the beginning of college):

First week	25%
Second through third week	50%
Beginning of fourth week	100%

Change of Status

The above withdrawal policy is also in force when a student changes credit hours, or room and board status, or both.

General Expenses

An *application fee* of \$15.00 must accompany the application for admission. This fee covers the cost of processing the prospective student's application, is non-refundable, and cannot be applied toward the payment of other charges.

A successful applicant should send to the Director of Admissions a *matriculation fee* of \$100.00 within 30 days of receiving his letter of acceptance. This deposit reserves space in class and a room for boarding students. It will be credited to the student's account when he matriculates. The fee is not refundable; \$50.00 will be returned should a student withdraw prior to February 15.

A *preregistration deposit* of \$100.00 is required of all matriculated students who plan to return to the College. The deposit is payable in the spring when a student pre-registers for the fall semester, is applicable to the fall semester's account, and is not refundable.

A *graduation fee* of \$10.00 is charged to each degree candidate. Cap, gown, and hood rental is paid upon placing an order.

Two transcripts of record will be provided free for all students in regular attendance. A charge of \$1.00 per copy will be made for each additional transcript. No transcripts are furnished to students whose accounts are not paid in full.

Checks should be made payable to Elizabethtown College.

Tuition and Fees for Medical Technology Students

There is an administrative charge of ten per cent of the College's tuition fees to the medical technology students entering their clinical year. In addition these students will pay the hospital any charges directly related to the intern year.

Financial Aid Policies and Programs

STUDENT AS CONSUMER

The U. S. Office of Education, in section 493A of the Higher Education Act as amended in 1976, requires post-secondary educational institutions to provide information on a variety of topics to prospective and enrolled students who request it. As education consumers, students should have available full, up-to-date information in order to make wise decisions about their educational futures.

POLICIES

The Student Financial Aid Program at Elizabethtown College operates in harmony with the principles of student financial aid administration developed by the College Scholarship Service Assembly of the College Entrance Examination Board. The primary goal is to help meet the financial need of students to enable them to secure a college education. Consequently, the number of no-need awards (awards based exclusively on factors other than financial need), is controlled to permit a majority of college funds to be used to meet financial need.

1. Elizabethtown College is committed to assuring equal opportunity to all persons regardless of race, religion, ancestry, color, national origin, sex, or handicap. This policy extends to employment, admission to the College, and consideration for student financial aids, and is in compliance with all federal laws, including Title IX of the Education Amendments of 1972.
2. Each applicant for financial aid must be accepted by Elizabethtown College and must have submitted an Elizabethtown College Application for Student Financial Aid, as well as a Financial Aid Form available from high school counselors or the Financial Aid Office. The filing deadline is April 1. If a student applies only for no-need grants, a Financial Aid Form is not necessary; however, the application must be received by March 1.

3. Late applications will be considered only if necessary funds are available.
4. The amount of financial aid granted to any student is based upon the extent of his financial need (defined as the difference between the total expenses of attending college and the total financial resources available to meet this expense) and the availability of necessary funds. The College considers financial aid to be a partnership shared by the student, parents, and College.
5. The College will determine which programs of financial aid best satisfy the need of the individual students. An award may be single, or a combination of three elements: grants, loans, and work.

Note: A student has 30 days from the time he receives notice of a financial award either to accept or reject the College's offer.

6. Students may lose financial aid by failing to maintain satisfactory academic performance or to make normal progress in accordance with the standards outlined in the college catalog.
7. Students must re-apply each year for all financial aid. No aid is automatically renewed.
8. Students' financial aid may change from year to year with changes in their financial status and in the availability of funds.
9. *Refund Policy:* Students who withdraw from the College after the beginning of the semester are obligated to pay the full semester's room charges; the actual board used to the date of withdrawal, plus 25 percent of the unused board; and tuition charges on the basis of the following schedule (the first day of registration counts as the beginning of college):

First week	25%
Second through third week	50%
Beginning of fourth week	100%
10. Parents have a legal and moral responsibility to provide a reasonable amount of financial assistance toward a student's college expenses. The fact that a student desires to be financially independent does not release parents from this responsibility.

11. Financial aid applicants who have previously attended another post—secondary school, college, or university must submit to the Financial Aid Office an official Financial Aid Transcript to document their financial aid record at all previous institutions.
12. The College holds in strictest confidence all financial information which it receives, and it considers any award to be a confidential matter between the College, the applicant, and the applicant's family. The College does not release information about individual awards and considers it inappropriate for aid recipients to do so.
13. All awards will be made for one academic year and will be divided equally between the two semesters.
14. Elizabethtown College reserves the right to make changes in the amount and type of a student's financial aid at any time during the year that either of two situations occurs: if the student receives additional unanticipated assistance from an outside source, or if the College receives information about current family income which varies from the income reported on the Financial Aid Form. Such changes are not only made to protect the equity of financial aid awards; they are also usually mandated by federal program requirements on aid eligibility.
15. No student may receive more than eight semesters of financial assistance; the College will not award aid to students who already possess a bachelor's degree.
16. A student must be enrolled on a full-time basis to be eligible for most institutional assistance.
17. Withdrawal from Elizabethtown College terminates any aid commitment by the College.
18. Foreign students wishing to study at Elizabethtown College need to show legal documentation that adequate financial resources are available to them before the Financial Aid Director will release the I-20 (student visa) Form.
19. A student receiving employee tuition benefits shall not be eligible for any other college-administered gift aid unless the student shows financial need.

Note: Data describing student retention at Elizabethtown College can be obtained from the offices of the Dean of the Faculty and the Dean of Student Affairs.

PROGRAMS

Scholarships

Elizabethtown College Presidential Scholarships

Twelve competitive scholarships are awarded annually to academically superior entering freshmen. Each award amounts to \$1,000 per academic year; financial need is not a factor considered in the selection process.

Applicants must rank in the top five percent of their secondary school class at the time they apply and must have achieved a combined Scholastic Aptitude Test score of at least 1100 on the College Entrance Examination Board test. In addition, applicants must plan to be enrolled full-time (12 credit hours or more) and display good academic promise, achievement, and citizenship; recipients of the scholarship must maintain these requirements to be eligible for scholarship renewal.

Elizabethtown College Academic Scholarships

These competitive scholarships are based on the academic record of the student, and range from \$200 to \$1,000. Students must rank in the upper ten percent of their high school class and have a minimum combination score of at least 1000 in the College Entrance Examination Board Tests or a composite score of 22 in the ACT test. Transfer students may also apply for this scholarship. They will be evaluated on the basis of their high school records, College Entrance Examination Board or ACT scores, and their records at their previous institution of higher education. Because these scholarships are awarded on a competitive basis, students do not automatically receive a scholarship if they meet the minimum requirements.

Elizabethtown College Dean's Privilege Scholarships

A student who has a cumulative quality point ratio of at least 3.50 at the end of his sophomore year at Elizabethtown College is eligible to apply for this scholarship. Eight \$500 awards are given annually. Students already receiving an academic scholarship of equal or greater value are not eligible.

Other Scholarship Programs

- National Merit Scholarships
- Elizabethtown Kiwanis Golden Anniversary Scholarship
- *Elmer L. and Frances E. Esbenschade Scholarship Aid Memorial Fund
- *National Central Bank Work-Scholarship Program
- *Mary Sachs Scholarship
- *Herman G. Enterline Scholarship
- *Sperry New Holland Scholarships
- *Musselman Foundation Scholarship
- *Ruth Eshelman Althouse Scholarship
- *Flavia Martz Baugher Memorial Teaching Fund
- *Grace C. Blough Music Scholarship Fund
- *Bullock Music Therapy Scholarship
- *Bethany Brethren Hospital Scholarship (Healing Arts)
- *The Ressler Mill Foundation Scholarship Fund
- *Thomas C. Conover Memorial Scholarship
- Greyhound Corporation Scholarship
- *R. Kent Replogle Scholarship
- *Robert S. Doherty Scholarship
- John P. Shepherd, Jr. Athletic Scholarship
- *A. Warren Angstadt Scholarship
- Future Business Leaders of America Scholarship
- High School Competitive Awards
- *Victor F. Weaver Scholarship
- *The Henry Scholarship
- *Purchasing Management Scholarship

Grants

Basic Educational Opportunity Grants (BEOG)

The BEOG is a federally funded gift assistance aid program. This program provides for aid to needy students based upon a formula unique to the program. Students desiring consideration must complete a BEOG/Pennsylvania Higher Education Assistance Agency (PHEAA) composite application form and submit it to PHEAA, which will analyze the information submitted and advise the student of his "Student Eligibility Index." The student must then forward the Eligibility Report to the college aid officer who will determine within guidelines the value of the student's award and notify the students. By law, such an award cannot exceed \$1,800 or half of the cost of attendance, whichever is less.

*Available to upperclassmen only

Supplemental Educational Opportunity Grants

Under the provisions of the Federal Higher Education Act of 1965 as amended in 1972, the College awards Supplemental Opportunity Grants to needy students. A student must be enrolled or accepted for enrollment on at least a half-time basis, must be capable of maintaining good academic standing, and have exceptional financial need. This grant is awarded on the basis of financial need as determined by the Financial Aid Form.

Pennsylvania Higher Education Assistance Agency (PHEAA) Grants

The PHEAA is responsible for the administration of the State Grant Program in Pennsylvania. Any Pennsylvania high school graduate who took the Scholastic Aptitude Test of the College Entrance Examination Board or the American College Test of the American College Testing Service during the junior year will be sent a State Grant application during October of his senior year. Any student who did not as a junior take either of these two tests is responsible for securing an application from his high school guidance counselor during November of his senior year or from the PHEAA, Grant Division, Towne House, Harrisburg, Pennsylvania 17102. The deadline for submitting the application to PHEAA is May 1 if the student plans to attend a four-year institution like Elizabethtown College.

The guidelines for the program state that an applicant must be (1) a citizen of the United States or taking steps to become a citizen; (2) a resident of Pennsylvania for 12 months immediately prior to the date of application; (3) classified as a full-time student (i.e., taking at least 12 semester hours that will count toward graduation). The awards are based upon financial need rather than scholastic achievement, although a student must maintain progress toward a degree.

Students other than current high school seniors who did not have a State Grant for the prior year may secure an application from the Financial Aid Office at Elizabethtown or from the PHEAA in Harrisburg. The filing deadline for this category of applications will probably be May 1.

Students in other states should contact their high school guidance counselors for information about possible state scholarship programs. Applicants for financial aid from the College are expected to apply for state scholarship or grant aid where available.

Elizabethtown College Grants

Elizabethtown College Grants are available for high school seniors and transfer students. These competitive one-year grants range in value from \$200 to \$1000. Students must rank in the upper 25 percent of their high school or college class, must show financial need, and must have demonstrated positive leadership, special talent, or general service in high school, college or local community activities. The student must reapply annually to be considered for the Elizabethtown College Grant. A renewal applicant must have at least a 2.00 cumulative quality point average.

Elizabethtown College Specialty Grants

The College awards a limited number of grants to students who possess special abilities or traits. These grants are based on demonstrated financial need and on maintenance of acceptable academic standing. Students receiving grants under this category possess athletic, performing arts, or other leadership skills deemed highly desirable to the college community in general. Minority students and foreign students are eligible for this grant in light of their unique cultural contributions to campus life.

Other Grants

There are several other grant programs for students who meet specific criteria of eligibility. *Parish Grants* of \$200 per year are available to students who are members in good standing of the Church of the Brethren. *Sibling Grants* of \$250 per year are available when two members of the same family enroll as regular full-time students at the College during the same academic year. The children of full-time ministers in the Church of the Brethren are eligible for the *Minister's Child Grant* of \$100 per year. Information to verify eligibility is secured from the students during registration for classes in the fall.

Employment

Work-Study Program

The College sponsors a Work-Study Program developed by the Federal Government under the Federal Economic Opportunity Act of 1964 for students who can demonstrate financial need. The need of each student is determined by the Financial Aid Form. A student employed under the Work-Study Program works in the same areas as a student employed under the Self-Help program. Work-Study students are given job priority over Self-Help students.

Elizabethtown College Self-Help Program

The College provides a large number of part-time employment opportunities for students in the dining hall, library, laboratories, residence halls, academic departments, and other areas. The dollar value of the assignments depends upon the nature of the work and the number of hours that the student can work each week. Students are paid at the rate established by the federal government for full-time students. Students currently enrolled at Elizabethtown College and, among them, students requiring financial aid, are given preference for student employment. The filing of a Financial Aid Form is requested but not required for this program.

Loans

National Direct Student Loan Program

Loans amounting to a maximum of \$1,000 per academic year are available through the College to qualifying students. To be eligible a student must be enrolled or accepted for enrollment as at least a half-time student, must demonstrate a definite need for a loan to pursue his course of study, and must be capable of maintaining a satisfactory academic standing. The financial need of the student is determined by the Financial Aid Form. The student borrower is not required to repay any principal or interest while he maintains satisfactory academic standing at the College. Upon graduation or other withdrawal, the borrower is given a repayment schedule. The interest rate is currently three percent per year on the outstanding balance. This loan program currently has a cancellation benefit for those students who plan to enter certain education fields; deferments are granted for graduate school, Peace Corps, VISTA, and the Armed Services.

State Guaranteed Student Loan Program

Under the provisions of the Federal Higher Education Act of 1965 as amended in 1976, most states have a Guaranteed Loan Program for college students. Students should consult their guidance counselor or a local banking institution for more information on the program. The programs are comparable in most states.

The maximum loan per academic year is \$2,500 and \$7,500 per undergraduate experience (four years). The federal government will pay the interest on all eligible Guaranteed Loans until nine months following the student's separation from the College at which time the student assumes the responsibility of repayment. The loan carries an interest rate of seven per cent. Applications are available only from participating lending institutions, a list of which

is available from the student's secondary school counselor. Processing should begin on these loans by July 1 of each year at the latest in order for students to receive the funds in time for registration.

External Financing Plans

The Girard Edu-Check Plan, available through Girard Trust Bank, enables the family to pay for college expenses on a monthly basis from current income. An important feature of the plan is the insurance coverage: if the parents' earning power is destroyed by disability or death, funds are provided each year to enable the student to complete his education.

Richard C. Knight Insurance Agency, Inc. offers two plans for financing a student's college expenses: the Insured Tuition Payment Plan and the Extended Repayment Plan. More information on these plans is available from the Financial Aid Office.

FINANCIAL AID APPLICATION PROCEDURE

Each applicant must file a financial aid application with the Financial Aid Office no later than April 1 to be considered for financial assistance for the following academic year. However, students applying for the Elizabethtown College Academic Scholarship must file by March 1. A student may secure an application for financial assistance by writing to the Financial Aid Office. The student affidavit must be notarized prior to submitting the application.

Each applicant for financial assistance must submit a Financial Aid Form to the College Scholarship Service in Princeton, New Jersey for processing. The Financial Aid Form enables the College to evaluate each applicant's need on a standard basis and may be secured from high school counselors or the Financial Aid Office at Elizabethtown College. (Students who are interested in applying only for the Elizabethtown College Academic Scholarship or Presidential Scholarship do not have to file a Financial Aid Form.)

Students should complete the statement and mail it to the College Scholarship Service no later than March 1 of each year for the College to have the results by the April 1 deadline. A student's financial aid application will not be considered complete until the results of the Financial Aid Form and the Financial Aid Application are received by the Financial Aid Office.

GENERAL INFORMATION REGARDING FINANCIAL AID

Elizabethtown College will begin making financial aid awards for the 1979-80 and 1980-81 academic year in October 1978, and October 1979, respectively. The Financial Aid Office hopes to notify all financial aid recipients before the end of May 1979, and May 1980.

Those who require an earlier decision of their financial aid application due to special circumstances should write directly to the Financial Aid Office indicating the reason why early financial aid consideration is required. The Financial Aid Office will try to inform them of the College's action. Those who have not received any reply from the College regarding financial aid by the end of May 1979, or May 1980 should contact the Financial Aid Office immediately. The Financial Aid Officer will be happy to schedule a personal interview with students and parents regarding their financial situation and the possibilities of financial aid at Elizabethtown College. An appointment may be obtained by writing to the Financial Aid Office at the College.

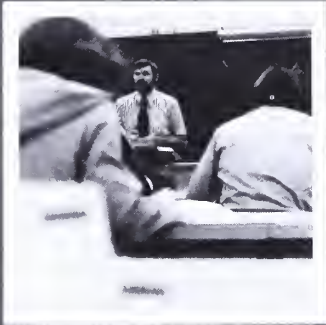
Since the sources of financial aid which are administered by the College are limited, the College is not able to award financial assistance to every qualified applicant. Students are encouraged to contact their high school counselors regarding other scholarships awarded by local organizations such as the Lions Club, Kiwanis Club, and the PTA. Students should check with their parents' employers regarding scholarship programs, and should investigate other external sources of financial aid such as the State Scholarship and Loan Programs.

All requests for applications and other information regarding financial aid should be directed to the Financial Aid Office, Baugher Student Center, Elizabethtown College, Elizabethtown, Pennsylvania 17022.

The complete counseling services of the Financial Aid Office are available to both enrolled and prospective students; services include information dissemination, budgeting assistance, and general assistance in planning the financing of a college education.

Appointments are scheduled between the hours of 8:30 a.m. and 5:00 p.m., Monday through Friday. The above financial aid policies and program descriptions are subject to change at any time as the result of new or amended state or federal legislation and changes in Elizabethtown College policies.

The Academic Program



The Academic Program

DEGREES OFFERED

Elizabethtown College grants three residence degrees: the Bachelor of Arts, Bachelor of Science, and Associate of Science.

Both bachelor degrees require the completion of 128 semester hours of credit, an average of at least 2.00 in the major, an average of at least 2.00 overall, and the completion of all requirements of the major and the General Education Core. Requirements for the associate degree, offered only in medical secretarial science, are the same except that only 64 credits are needed.

The College offers two additional degrees through the Center for Continuing Education: the Bachelor of Professional Studies and the Bachelor of Liberal Studies.

THE ACADEMIC MAJOR

The College offers degrees in the following academic majors within which a number of options and concentrations are available. For details of courses, options, concentrations, and major requirements, students should consult the departmental listings in this catalog.

Accounting (Business), B.S.
 Biology, B.S.
 Business Administration, B.S.
 Business Education (Business), B.S.
 Chemistry, B.S.
 Communication Arts, B.A.
 Early Childhood Education, B.S.
 Economics (Business), B.A., B.S.
 Elementary Education, B.S.
 Engineering (Physics), B.A.
 English, B.A.
 Forestry and Environmental Management (Interdisciplinary), B.S.
 General Science Certification (Interdisciplinary), B.S.
 History, B.A.
 Mathematics, B.S.
 Medical Secretarial Science (Business), A.S.
 Medical Technology (Chemistry), B.S.
 Modern Languages, B.A.

Music, B.A.
 Music Education, B.S.
 Music Therapy, B.S.
 Occupational Therapy, B.S.
 Physics, B.S.
 Political Science, B.A.
 Psychology, B.A., B.S.
 Religion and Philosophy, B.A.
 Social Dynamics (Sociology), B.A., B.S.
 Social Science (Interdisciplinary), B.S.
 Social Studies Certification (Interdisciplinary), B.S.
 Social Work (Sociology), B.A., B.S.
 Sociology, B.A., B.S.
 Sociology-Anthropology, B.A., B.S.

THE COLLEGE WRITING COMPETENCY REQUIREMENT

Those incoming freshmen who fail to demonstrate basic language skills and writing ability according to diagnostic testing the summer prior to beginning college work will be required to take either (1) English 021 (Basic English) followed by English 100 (Expository Writing) or (2) English 100. Those students who demonstrate competency in language and writing skills will be permitted to proceed to English 105 (Introduction to Literature).

THE GENERAL EDUCATION CORE

Through the General Education Core curriculum the College affords each student a broad exposure to the liberal arts and the sciences, and thus ensures a general comprehensive education which complements both the more intensive studies in the academic major and the less structured framework of elective courses. Core courses (identified below and in the course listings) are of two kinds: prescribed individual course requirements, and area distribution requirements in which students may choose from among a list of approved courses within the general prescribed academic area.

Alternatives to the Core curriculum, or deviations from it, must be approved by the Academic Standing Committee.

A detailed list of Core requirements and courses follows.

Core Area Requirements

<i>Area</i>	<i>B.A. Hours</i>	<i>B.S. Hours</i>	<i>A.S. Hours</i>	
Literature	6	6		Complete English 105 and one other course from among the English, French, Spanish, or German literature courses listed below. Note: courses in composition, literary criticism, or the teaching of English do not fulfill the literature Core requirement.
			3	Complete English 105.
Modern Language	6			Each student for the bachelor of arts degree must complete six credits of intermediate language or demonstrate competency equal to intermediate college language 202. Normally, students with two to three years of high school language will, through proficiency tests, place directly into 201–202, thereby fulfilling the Core requirement; such students will not receive credit for beginning language 101–102, should they decide to take it. However, students with a poor high school language background who do not place directly into intermediate language must take, and upon the recommendation of the instructor will receive credit for, 101–102. Such students must still take 201–202 to meet the Core modern language requirement.
Fine Arts	3	3	3	Complete three hours in any of the art, communication arts, and music courses listed below.
Religion and Philosophy	6	6	3	Complete the required hours in any of the philosophy and religion courses listed below.
History	6	6		Complete History 105 and one other history course from among the history courses listed below.
			3	Complete History 105.
Social Science	9	9	6	Complete the required hours in any of the economics, political science, psychology, anthropology, and sociology courses listed below.
Mathematics	3	6		Complete the required credit hours from among the mathematics courses listed below. Note: many mathematics courses require prerequisite lower-level mathematics courses; Mathematics 011 does not fulfill the mathematics Core requirement.
Science	8	8	8	Complete the required credit hours from among the biology, chemistry, physics, and earth science courses listed below, taking two courses in one science, or one course in physics and one in earth science. Students must take the associated laboratory if the course is to count for Core. Note: many science courses require prerequisite lower-level science courses; geography courses do not fulfill the science Core requirement.

Area	B.A. Hours	B.S. Hours	A.S. Hours	
Physical Education	4	4	2	Complete four activity courses, including at least one but not more than two aquatics activities, from among the courses listed below. Physical Education 270 counts as three hours towards graduation, but fulfills only one credit towards Core. Physical Education 150, 160, 260 will count for Core credit only once each. No more than six physical education credits may be counted toward the 128 for graduation.

Core Courses

Courses which fulfill the area requirements noted above follow.

Literature

English 213, 241, 242, 312, 313, 314, 317, 318, 320, 322, 323, 327, 328, 331, 332, 333, 337, 338, 339, 340, 341, 342, 352, 357.
Language 323, 401, 402, 481–490; German 411, 412, 413, 414, 417, 418, 422; French 418, 421, 422, 431, 432; Spanish 413, 414, 421, 422, 432.

Fine Arts

Art 105, 211, 221, 251, 321, 324, 355, 371–380.
Communication Arts 151, 167, 252, 257, 268, 350–359.
Music 101, 102, 105, 111, 120, 235, 415, 417, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 360, 361, 362, 365, 368, 369.

Religion and Philosophy

Religion 105, 115, 125, 201, 202, 221, 222, 230, 231.
Philosophy 105, 115, 201, 212, 255.

History

History 201, 202, 205, 211, 212, 213, 214, 215, 216, 306, 313, 314, 317, 318, 323, 324, 327, 328, 330–339, 340–349, 370–379, 390, 403, 406, 480–489, 498–499.

Social Science

Anthropology 201, 202, 307, 308, 311, 360, 371–380, 410, 481.
Economics 101, 102, 301, 302, 303, 304, 306, 307, 308, 309, 370–379, 480–489.
Political Science 105, 117, 118, 202, 205, 301, 303, 308, 327, 342, 370–379, 381, 401, 412.
Psychology 105, 213, 214, 215, 225, 226, 235, 317, 318, 321, 322, 333, 370–379, 387, 402, 413, 414, 416, 471–472, 480–489, 491–492.
Sociology 101, 201, 212, 215, 217, 220, 225, 301, 305, 310, 311, 340, 342, 344, 347–351, 371–380, 481–491.

Mathematics

Mathematics 101, 117, 118, 121, 122, 151, 201, 211, 212, 222, 301, 302, 321, 324, 341, 351, 352, 361, 362, 370–379, 421, 422, 441, 480–489.

Science

Biology 105–505, 106–506, 108–508, 111, 112, 201, 202–502, 212, 215–515, 235, 313–513, 321, 322–522, 324–524, 331, 332, 341, 342, 343, 347, 352, 370, 379, 380–389, 412, 480–489.
Chemistry 101, 102, 104, 201, 202, 305, 315, 325, 341, 343, 344, 351, 352, 451, 370–380, 402, 421, 491, 492.
Earth Science 105, 107, 108, 111, 112, 301, 370–379, 481–489.
Physics 111, 203, 204, 132, 231, 232, 305, 306, 343, 344, 345, 370–379, 403, 404, 407, 408, 490, 481–489.

Physical Education

Physical Education 105, 115, 125, 135, 145, 150, 155, 160, 165, 185, 195, 205, 210, 215, 217, 218, 225, 235, 240, 245, 250, 255, 260, 265, 290, 295, 370–380, 481–490.

PROGRAM VARIATIONS AND OPTIONS

In addition to the major programs indicated above, Elizabethtown College offers a number of alternative learning opportunities: off-campus study abroad and in joint programs at other academic institutions and affiliated clinical facilities, on-campus study in the experimental May term, and in a number of special study programs which emphasize individual study and close work with a member of the faculty.

Off-Campus Study

Study Abroad

The College participates in programs offering study abroad in Germany, France, Spain, England, Ghana, and Mexico.

The six colleges associated with the Church of the Brethren cooperate in the Brethren Colleges Abroad (BCA) program, offering a junior year of study in Germany, France, or Spain. Students may study at Phillips-Universität, Marburg/Lahn, West Germany; at the University of Strasbourg, France; or at the University of Barcelona, Spain. A wide selection of courses is offered in the social sciences and the humanities. Students are given intensive language instruction prior to the opening of the university semesters.

To qualify for the BCA program, students bound for Germany must have completed the equivalent of the second year of German in college and have approximately a B average. Although most students bound for France or Spain must also have completed the equivalent of two college years of French and Spanish, outstanding students who have completed the first year will be accepted. Other qualifications include seriousness of purpose, good character, demonstrated potential for social adjustment, and a basic understanding of the United States and the host country. The credits earned abroad are transferred toward the degree at Elizabethtown. A faculty adviser is in residence in Europe during the year.

The program accommodates about 25 students at each university; Elizabethtown College has a quota of three or four for each. Interested students should confer with Dr. J. Kenneth Kreider, BCA Program Coordinator, and their major adviser.

In addition to the BCA program the College offers a semester in England for early childhood, elementary, and secondary education majors. Students attend full-time at St. Mary's College, Cheltenham, England, where they enroll in a Seminar in British Culture and Education, and select an additional three or four courses. Credit for these courses is applied toward the degree at Elizabethtown College. First semester students depart in early September and return before Christmas; second semester students depart in late January and return in late May. For information contact Dr. Paul Rice, Chairman of the Department of Education.

Elizabethtown College has further programs of study abroad at the University of Ghana (Accra), and at the University of the Americas (Puebla, Mexico). Courses are taught in English at the University of Ghana, while the University of the Americas uses both Spanish and English. Further information on Ghana may be obtained from Dr. Bela Vassady, and on Mexico from Professor Bruce Lehr.

Joint Institution Programs

In these programs students study at the College and at affiliated academic institutions or clinical facilities. There are three major programs with other academic institutions: pre-forestry with Duke University, pre-engineering with Pennsylvania State University, and study at the Merrill Palmer Institute.

In the pre-forestry program the student spends three years at the College and an additional year in professional studies at Duke, at which time the College grants the bachelor of science degree; an additional year at Duke leads to a master's degree in forestry or environmental management. For further details see the interdisciplinary section of this catalog, page 89.

The pre-engineering major is a 3-2 program with Pennsylvania State University. After completing three years at Elizabethtown College, the student transfers to University Park, completes two years of work in an engineering field, and receives a bachelor of arts degree from Elizabethtown College and a bachelor of science degree from Pennsylvania State University. For further details see the description in the Physics Department listing of this catalog, page 78.

The College offers students the chance to participate in the Merrill Palmer Institute's program in human development and family life, which offers a flexible curricula in psychology, sociology, anthropology, urban and community studies, and education. Students usually participate in this program in their junior year and, although they are encouraged to attend the one-year program, may attend for one semester only. Interested students should consult the chairman of the Psychology Department for further information.

The College also offers a number of programs in which work at affiliated clinical facilities constitutes an important part of the student's education. In the music therapy, occupational therapy, social work, medical technology, and medical secretary programs, students combine work at the College with first-hand experience in hospitals, clinics, professional offices, and social work and therapy programs. For detailed descriptions see the listings under the Departments of Music, Occupational Therapy, Sociology/Anthropology/Social Work, Chemistry, and Business.

On-Campus Study

May Term

May Term features courses which are not normally offered during the regular year, and which are often experimental or interdisciplinary in nature. May term is unusually concentrated, covering a full semester's work in about three weeks. May Term offerings are announced early in the spring term.

Special Study Programs

Elizabethtown College recognizes the advantages and the need of education and study outside the traditional classroom, and offers the following special study programs:

Independent Study shall be undertaken for the special investigation of a topic or for the benefit of the advanced student whose special academic requirements cannot be met by regular catalog offerings. It should not be used simply to assemble credits for graduation. To apply for an Independent Study one must make a preliminary definition of the topic or issue to be pursued, securing the permission of the faculty sponsor and the chairman of the department in which the Independent Study is undertaken. The faculty member or members sponsoring the Independent Study will be involved in planning and evaluating the project, but the student should be capable of independent work. Independent Study is not tied to the academic calendar, and a project may be begun or ended at any point. It is to be registered with the Registrar at the beginning of the semester during which it will be completed. Application forms for Independent Study are available at the Registrar's Office.

Directed Study is a second type of study available to matriculated students at Elizabethtown College. In contrast to independent study of a special topic, Directed Study will be undertaken for a regular catalog course which is not a part of the course offerings for the given semester. This method of study should be used by the student who needs rather frequent conferences with the professor.

Currently, a full-time student shall be charged two-thirds of the current part-time rate for the Directed Study in addition to his regular tuition. Part-time students or students whose load exceeds 18 hours shall be charged the current part-time rate.

Tutorials are available where remedial work is necessary for the student to profit from a classroom course. A tutorial involves more frequent meetings between professor and student than either Independent Study or Directed Study. Generally a faculty member will not teach more than one tutorial per semester.

Any student who enters into a tutorial agreement shall be charged at the rate of one and a half times the part-time rate over and above his regular tuition.

It is the responsibility of the student to locate a professor who is willing to enter into the tutorial agreement. The student shall register for these studies in the Registrar's Office.

DEVELOPMENTAL STUDIES

The Developmental Studies program has two thrusts. First, it provides support services (peer and professional tutoring, group and peer counseling) to all students. These services are described more fully in the campus life section of this catalog, page 99. Second, Developmental Studies provides instructional services to aid students to achieve mathematical, reading, and writing competency in order to compete in college-level courses.

Every year the College actively seeks a limited number of students who may not meet admissions criteria but who show potential and who, with skill development and support services, may succeed in college. No student may participate in the program for credit unless eligibility is established. Questions of eligibility should be referred to the Director of Developmental Studies who will consult test scores in writing, mathematics, and reading. A maximum of six credits may be earned in Developmental Studies courses. These credits may apply toward graduation but do not apply toward Core or major requirements.

The following courses are provided through the Developmental Studies program.

DS 001 Human Potential Seminar

1 credit. This small group experience provides a structure within which individuals share extensive positive information about themselves in hopes of coming to a greater awareness of the importance of affirming their own and others' potentials. Seminar participants detail their values, satisfying experiences, personal strengths, and life goals.

DS 011 Intermediate Algebra (Mathematics 011)

2 credits. A study of the fundamental algebraic and computational skills used in certain science courses and prerequisite to Mathematics 101 and 117. Graded pass/no pass.

DS 021 Basic English (English 021)

2 credits. A study of the basic skills of writing (grammar, usage, mechanics) with emphasis on paragraphing. Graded pass/no pass.

DS 031 Reading and Study Skills

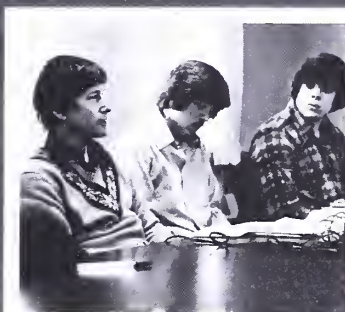
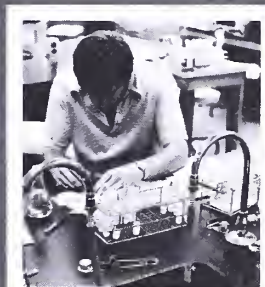
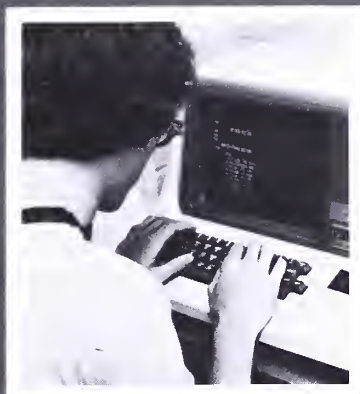
1 credit. Individualized instruction in reading improvement and study skills in a laboratory setting. A wide selection of materials provides students with a solid foundation in the theories and techniques of effective studying upon which they can build a system of study adapted to their individual needs.

CONTINUING EDUCATION

Elizabethtown College regards the training and education of working adults and nontraditional constituencies as integral to its academic program, and provides non-credit and baccalaureate credit education, both in the nontraditional context and in traditional resident programs of study at the College. In traditional programs at the Elizabethtown College campus, adults may pursue the bachelor of arts and bachelor of science degrees through the Evening Division and regular day course offerings. Moreover, at the University Center in Harrisburg, (a consortium comprising Elizabethtown College, Lebanon Valley College, Pennsylvania State University, Temple University, and the University of Pennsylvania), adults may pursue evening programs of study leading to Elizabethtown College degrees. In addition to these traditional campus programs, the College offers an external degree program for adults, working with them to develop an individualized program of study leading to associate or bachelor degrees of professional studies or liberal studies. This program enables adults to combine a traditional classroom education with a faculty assessment and recognition of significant academic learning acquired through life and work experience, and credits attained through standard examinations such as College Level Examination Program (CLEP), College Preparatory Examination Program (CPEP), Advanced Placement Program (APP), and United State Armed Forces Institute (USA-FI). The College also offers, or shares sponsorship of, a number of non-credit workshops and seminars for business and industry, for allied health professionals, and in recreational learning for adults.

For detailed information on continuing education at Elizabethtown College, admission requirements to degree programs, or enrollment in non-credit activities, contact the Center for Continuing Education, Nicarry Hall, Elizabethtown College.

Course Descriptions



Course Descriptions

Following, arranged alphabetically by departments or programs, are the courses offered by the College. For each department, there is first a section treating the programs offered. This is followed by a second section which discusses the required courses in each program or concentration.

Some departments offer majors or concentrations in more than one academic discipline. For convenience, these academic disciplines are listed alphabetically in the text, and the reader is there referred to the appropriate department.

ACCOUNTING

See Department of Business, page 44.

ANTHROPOLOGY

See Department of Sociology-Anthropology-Social Work, page 86.

DEPARTMENT OF ART

Professor Henry M. Libhart (*Chairman*)

The academic and the practical courses in the art program aim to help students refine their creative potential and expand their judgment of the visual arts. Studio courses in both two-dimensional and three-dimensional media are offered, but physical limitations necessitate permission of the Department for any student to enroll in a studio course. There are no prerequisites for any of the art courses at the College.

105 Drawing

3 credits. (Core) Studio practice in basic drawing media for sketching and rendering both live and inanimate subjects.

211 Color and Design

3 credits. (Core) Studio easel painting in opaque media with stress on pictorial organization and application of color theories.

221 Sculpture

3 credits. (Core) Basic sculpture technique in assemblage, modeling, and carving of three-dimensional materials. Fall semester.

251 Printmaking

3 credits. (Core) Experience in silk-screen operations and the several methods of relief and intaglio plates, and instruction in the use of the printer's machinery.

321 Ceramics

3 credits. (Core) Direct techniques of potting, including hand-building, wheel operation, glazing, and firing, with readings in ceramic history and design.

324 American Arts and Crafts

3 credits. (Core) Comprehensive scan of U.S. arts, observing their derivation from social, ethnic, and aesthetic influences.

355 Introduction to Art

3 credits. (Core) Experience with selected works by major and minor artists of the modern epoch, as a means of recognizing and evaluating artistic style.

371-380 Seminars in Fine Arts

Variable credit. (Core) Offered as occasion justifies.

DEPARTMENT OF BIOLOGY

Professors Heckman (*Chairman*), Pepper
Associate Professors Dively, Hoffman, Laughlin
Assistant Professor Polanowski

Bachelor of Science

The courses of the Department of Biology have been designed to provide a foundation in basic concepts and principles involving the structural, functional, and environmental aspects of the living world. The Department seeks to provide the liberal arts student with a choice of courses emphasizing biological theories which provide a broad and unifying understanding of nature's life forms and man.

The curriculum for a Bachelor of Science in Biology is designed for optimal individualized scientific preparation for success in graduate school, professional schools of medicine, and allied fields, as well as for the student desiring immediate entry into biologically oriented employment opportunities.

The Department makes a special effort to involve students in research projects with professors, and senior seminar and independent studies.

The Department of Biology offers five concentration options:

The biology major option prepares the student for a biologically related profession or for graduate school. The specific requirements are Biology 111, 112, 215 and 515, 212, 313 and 513, 412, and 12 additional hours in biology, including one course selected from 321, 322 and 522, or 324 and 524, one course selected from 235, 331, or 332, and one course selected from 347, 341, 342, or 343. Other course requirements are Chemistry 101, 102, 201, 202; Physics 203, 204; Mathematics 101, 121; or 117, 118; and a foreign language through the 202-level, or through 102 plus Mathematics 151.

The biology medical option prepares the student for entry into professional schools of medicine or related fields. The specific requirements are the same as those for the biology major except that students should select Biology 235, 343, 341, or 342 instead of 331, 332, or 347.

The secondary general science certification option enables the student to receive secondary school general science certification. Students interested in this area should consult the detailed description in the interdisciplinary section of this catalog, page 89. Further information may be obtained from Dr. Hoffman.

The secondary education certification option prepares the student for the receipt of Pennsylvania Secondary Education Certification within the framework of the general program leading to the bachelor of science degree in biology. This option is designed to provide a strong background in the sciences while simultaneously fulfilling the requirements for secondary teaching certification. The specific requirements are Biology 111, 112, 215 and 515, 212, 313 and 513, and 13 additional hours in biology. Other course requirements are Chemistry 101, 102, 201, 202; Physics 203, 204; Mathematics 101, 121; or 117, 118; Psychology 105; Education 215, 225d, 225e, 305, and 472. Persons interested in this concentration should consult with Dr. Hoffman.

The biology pre-forestry option offers a biology concentration in the five-year cooperative program in forestry and environmental management with Duke University leading to a bachelor of science degree from Elizabethtown College and a Master of Forestry or Master of Environmental Management from Duke University. Students interested in this option should see the detailed description in the interdisciplinary section of this catalog, page 89. Further information may be obtained from Mr. Laughlin.

105 Principles of Biological Science

3 credits. (Core) Designed for the non-biology major. An overview of basic biological principles and concepts, emphasizing their relevancy to our daily lives. Discussion of current issues and problems in an attempt to provide an understanding and respect for the basic mechanisms of life. *Corequisite (to satisfy Core) Biology 505*

505 Principles of Biology Science Laboratory

1 credit. (Core) Designed to accompany Biology 105, these laboratory exercises demonstrate many of the important biological principles covered in the lecture course. *Prerequisite or corequisite Biology 105.*

106 Evolution

3 credits. (Core) Designed for the non-biology major. A simple, concise account of the scope and significance of evolution with an emphasis on the mechanisms of evolution. It is directed toward the college student seeking a liberal education. *Corequisite (to satisfy Core) Biology 506.* Spring, alternate years.

506 Evolution Laboratory

1 credit. (Core) A series of laboratory exercises intended to illustrate some of the mechanisms of evolution in action. *Prerequisite or corequisite Biology 106.* Spring alternate years.

108 Man and His Environment

3 credits. (Core) Designed for the non-biology major. Discussion of basic principles of environmental interrelationships, and a consideration of specific problem areas such as pollution, radiation, and population growth with regard to those principles. *Corequisite (to satisfy Core) Biology 508.* Spring semester.

508 Man and His Environment Laboratory

1 credit. (Core) Includes field trips to water and sewage treatment plants, testing for various contaminants in the environment, and exercises in measurement of consumption and planning. *Prerequisite or corequisite Biology 108.* Spring semester.

111 General Biology

4 credits. (Core) The study of the chemical and cellular basis of life, animal anatomy and physiology, cellular reproduction, heredity, and animal development. This course is designed for biology majors and those students taking additional biology courses beyond Biology 112. Hours: lecture 3, laboratory 3. Fall semester.

112 General Biology

4 credits. (Core) The study of the evolution and diversity of organisms, the animal kingdom, photosynthesis, plant anatomy and physiology, viruses, monera, and the plant kingdom. This course is designed for biology majors and those taking additional biology courses. Hours: lecture 3, laboratory 3. *Prerequisite Biology 111.* Spring semester.

201 Human Anatomy

4 credits. (Core) A study of human structure at the tissue, organ, and system levels. Particular attention given to the correlation of structure to normal and abnormal function. Laboratory work involves dissection of human cadavers and a cat. Student enrollment limited to occupational therapy, nursing, and medical technology majors. Hours: lecture 2, laboratory 4. *Prerequisite Biology 111, permission of instructor.* Fall semester.

202 Human Physiology

3 credits. (Core) A functional study of cells, tissues, organs, and organ systems of man; emphasis on disorders as they relate to the understanding of normal function. Enrollment limited to occupational therapy, nursing, and medical technology majors. *Prerequisite Biology 111, permission of instructor.*

502 Human Physiology Laboratory

1 credit. (Core) A study of selected cardiovascular, respiratory, renal, muscular, neural, and endocrine control mechanisms; emphasis on "hands on" manipulation of instruments useful to the health profession student. *Prerequisite or corequisite Biology 202.* Spring semester.

212 Molecular Biology

3 credits. (Core) An integrated and comprehensive review of recent biological developments at the molecular level. Information, drawn from a wide variety of biological disciplines, concerning the interaction of biological molecules. *Prerequisite Biology 112 or permission of instructor.* Spring semester.

215 Genetics

3 credits. (Core) A study of classical and neo-Mendelian principles of heredity. *Prerequisite eight hours of biology or permission of instructor.*

515 Genetics Laboratory

1 credit. (Core) Techniques of genetic experimentation. *Prerequisite or corequisite Biology 215.*

235 General Microbiology

4 credits. (Core) A study of the morphological, physiological, cultural, and ecological characteristics of bacteria, including immunological principles. A laboratory gives practice in the isolation and identification of bacteria. Hours: lecture 2, laboratory 5. *Prerequisite Biology 112, Chemistry 102 or 104.*

313 General Ecology

3 credits. (Core) The relationships between plants, animals, and their environment are investigated with regard to energy flow, mineral cycling, physical and chemical parameters, population changes, and community structure. *Prerequisite 16 hours of biology or permission of instructor.* Fall semester.

513 General Ecology Laboratory

1 credit. (Core) Use of techniques and instrumentation for aquatic and terrestrial field studies, experimentation in such areas as animal behavior, population growth, competition, productivity, and mineral cycling. *Prerequisite or corequisite Biology 313.* Fall semester.

321 Plant Physiology

4 credits. (Core) A study of plant growth and development, including a discussion of photosynthesis, mineral nutrition, carbon and nitrogen metabolism, water relations, and plant hormones. Hours: lecture 3, laboratory 4. *Prerequisite Biology 331, and Chemistry 102 or 104; or permission of instructor.* Fall semester.

322 Cell Biology

2 credits. (Core) A morphological and physiological study of cells and cell mechanisms. Metabolic activities are studied and associated with cell organelles. *Prerequisite* Biology 112, Chemistry 202. Spring, alternate years.

522 Cell Biology Laboratory

2 credits. (Core) A qualitative and quantitative study of cellular chemical construction and enzymatic pathways through various extraction and analysis techniques. *Prerequisite or corequisite* Biology 322, Spring, alternate years.

324 General Physiology

3 credits. (Core) A functional study of vertebrate organs and organ systems. Attention focused on similarities and specialization in relation to function, with emphasis on functional adaptations to the environment. *Prerequisite* Biology 112. Spring semester.

524 General Physiology Laboratory

1 credit. (Core) An investigation of selected physiological mechanisms, employing spectrophotometers, datagraphs, spirometers, oscilloscopes, electrocardiographs, electrophoresis, and animal surgical techniques. *Prerequisite or corequisite* Biology 324. Spring semester.

331 Comparative Plant Morphology

4 credits. (Core) A comparative study of the plant kingdom with emphasis upon the various levels of organization, structure, and the development and relationships of the major plant groups. Hours: lecture 3, laboratory 4. *Prerequisite* Biology 112 or 105. Fall, alternate years.

332 Taxonomy of Vascular Plants

4 credits. (Core) Examination of family characteristics useful in plant identification, using live material and transparencies. Taxonomic principles and distribution of plants discussed. Plant collection and some Saturday trips required. Hours: lecture 3, laboratory 4. *Prerequisite* Biology 112 or 105. Spring, alternate years.

341 Comparative Anatomy

4 credits. (Core) A comparative and embryological study of morphology of selected representatives from the phylum chordata. Laboratory work involves dissection and demonstration of organisms from major chordate groups. Hours: lecture 2, laboratory 4. *Prerequisite* Biology 112. Fall semester.

342 Developmental Biology

4 credits. (Core) A survey of biological development covering the molecular, cellular, and organismic levels with special emphasis on control

mechanisms. The laboratory emphasizes vertebrate animal development. Hours: lecture 2, laboratory 4. *Prerequisite* Biology 215. Spring semester.

343 Histology and Bio-Medical Technique

4 credits. (Core) A basic microscopic study of vertebrate tissues. The laboratory includes biomedical techniques of paraffin sectioning, staining, and slide preparation. Hours: lecture 2, laboratory 4. *Prerequisite* Biology 112. Fall semester.

347 Invertebrate Zoology

4 credits. (Core) A study of the evolution of invertebrate animals from simple to complex forms, structural and functional similarities and differences, and the evolutionary trends necessary for an understanding of basic adaptive features. Hours: lecture 2, laboratory 5. *Prerequisite* Biology 112 or permission of instructor. Fall, alternate years.

352 Applied Microbiology

4 credits. (Core) A study of microorganisms as they relate to their natural environment, food processing and contamination, and to public health. Hours: lecture 2, laboratory 5. *Prerequisite* Biology 235, Chemistry 201. Spring, alternate years.

370-379 Special Topics in Biology

Variable credit. (Core) Courses of a specialized nature reflecting the interests of the instructor. Courses offered on a random basis.

380-389 Directed Study in Biology Topics

Variable credit. (Core) Directed study in biological areas in which the student meets regularly with the instructor on an individual basis. Laboratory work may include self-directing aids. *Prerequisite* permission of instructor.

412 Seminar in Biology

1 credit. (Core) Students will present laboratory or literature research to faculty and peers. Topics will vary from year to year. *Prerequisite* 18 hours in biology. Spring semester.

480-489 Independent Problems in Biology

Variable credit. (Core) Designed to allow the student to do independent research in some phase of biology. *Prerequisite* 16 credits in biology, permission of instructor and Department Chairman.

Education 305 Practicum in Secondary Education: Science

4 credits. Teaching science in secondary schools. *Prerequisite* Education 215; *corequisite* Education 225e.

DEPARTMENT OF BUSINESS

Professor Bitting

Associate Professors Eppley, Buffenmyer
(*Chairman*), Evans, Gliptis, C. Kreider, Neyer
(*Associate Chairman*), Pomroy

Assistant Professors Bleau, Muston, Trostle
Instructor S. Dolan

*Bachelor of Arts, Bachelor of Science;
Associate of Science*

The primary objective of the Department of Business is to provide comprehensive programs of professional education for young men and women who wish to achieve responsible positions in private and public business organizations and in academic institutions. These programs are based strongly on the tradition of a liberal arts education. Their general objectives are to prepare contemporary and future leaders, to develop a broad understanding of the nature of business and its role in society, to enlarge the students' competence in the qualities for success in the business world, and to provide the foundation for graduate study, continuing self-education, and personal development.

The Department of Business offers five programs:

Bachelor of Science in Accounting. Preparation for entrance into the profession of accounting (public, private, or governmental) requires a basic business core in addition to a proficiency in accounting. Because of the increased emphasis upon computer and quantitative techniques by business, students are urged to elect additional courses in these areas.

Bachelor of Science in Business Administration. Preparation to become tomorrow's business leader requires a broad background in business, a knowledge of the behavioral and social sciences, and the ability to use quantitative techniques in solving problems. This background and these basic tools will emerge from the business core, the General Education Core, and specific mathematics requirements. A student will gain further understanding of a specific area of business by concentrating in one of five areas: accounting, computer science, economics, management, or marketing.

Business administration offers a concentration in the forestry and environmental management major. Students interested in this major should consult the detailed description in the interdisciplinary section of this catalog, page 89.

A bachelor of science degree in accounting or business administration may be earned in the evening program of the College. For further information see the special Evening Session bulletin.

Bachelor of Science in Business Education. For students who plan to teach in the business department of a secondary school the business education curriculum provides a liberal training in courses outside the field of business, a broad background in business, depth in at least two certification areas in business, and professional education. The professional training will be conducted by personnel who have been secondary business teachers and who maintain an awareness of current developments through close relationships with business departments in area high schools and vocational-technical schools.

Bachelor of Arts or Science in Economics. Preparation for a career in economics requires a broad background in basic economic theory coupled with an in-depth study of the quantitative tools so important to today's economist. The economics curriculum is designed to provide the student with this breadth and depth. In light of the increasing emphasis on the quantitative approach to economic theory, students are advised to select courses in mathematics and computer science beyond those specifically required in the economics curriculum.

Economics is one of the major areas both in the social studies major preparing a student for certification to teach in secondary schools, and in the interdisciplinary social science major. Students with interests in either area should consult the detailed descriptions in the interdisciplinary section of this catalog, page 89.

Associate of Science in Medical Secretarial Science. This two-year program prepares students for employment in a medical office, a dental office, a hospital, or other health care facility. The curriculum includes a liberal arts core along with pertinent secretarial skills and a series of medical secretarial courses. The program is designed to provide the student with a foundation in the behavioral and social sciences, the liberal and fine arts, as well as specific training for the medical secretary profession.

ACCOUNTING

A major in accounting includes Accounting 105, 106 (or 107, 108), 205, 206, 305, 306, 12 additional semester hours in accounting; Business Administration 215, 248, 265, 325, 331, 332; Computer Science 125; Economics 101, 102; Mathematics 117 or 121, and 151.

BUSINESS ADMINISTRATION

A major in business administration includes Accounting 107, 108, (or 105, 106); Business Administration 215, 248, 265, 325, 331, 332; Computer Science 125; Economics 101, 102; Mathematics 117 or 121, and 151. Each student must also choose a concentration in one of the following areas: accounting, computer science, economics, management, or marketing. Twelve semester hours beyond those listed above must be taken in the concentration area (nine of those 12 hours must be taken on the Elizabethtown College campus).

BUSINESS EDUCATION

A major in business education includes Accounting 105, 106; Business Administration 215, 331, 332; Business Education 111, 421; Computer Science 125; Economics 101, 102; Mathematics 151; Psychology 105; and the professional education program for secondary certification: Education 215, 225d, 225e; Business Education 305, 472 (Education 305, 472). Each student must also choose two or more of the following certification areas: accounting, computer science, marketing, secretarial, typing. Speech proficiency is also required.

ECONOMICS

A major in economics includes Economics 101, 102, 301, 302, 309, 15 additional semester hours in economics; Business Administration 248; Computer Science 125; Mathematics 151, 121, or 117–118; nine semester hours of history; and nine semester hours of political science, or sociology, or both.

MEDICAL SECRETARIAL SCIENCE

The requirements for the associate degree in medical secretarial science include Business Education 212, 221, 223; Medical Secretary 101, 109, 211, 219, 272; a year of biology or chemistry; Communication Arts 105; English 105; History 105; Sociology 101; Psychology 105; two semester hours in physical education; and three semester hours each in fine arts and religion/philosophy. A 2.0 quality point average in the major (business education and medical secretary courses) is required prior to Medical Secretary 272.

ACCOUNTING**105 Principles of Accounting I**

3 credits. An introductory course for students who intend to continue in accounting courses. The accounting cycle, financial statements, and assets. Fall semester.

106 Principles of Accounting II

3 credits. A continuation of 105. Liabilities, equity accounts, ratio analysis, and introduction to cost accounting. *Prerequisite Accounting 105.* Spring semester.

107 Financial Accounting

3 credits. An introductory course designed to acquaint the student with basic accounting methodology and the structure and interpretation of financial statements used in external reporting. Fall semester.

108 Managerial Accounting

3 credits. A study of the use of information gathered from accounting records and other information sources to prepare internal reports and analyses in order to assist management in control and decision-making. *Prerequisite Accounting 107.* Spring semester.

205 Intermediate Accounting I

3 credits. A thorough study of various accounting concepts and generally accepted accounting principles; the application of these principles to the various assets and related revenue and expense accounts as presented in the income statement and balance sheet. Emphasis on valuation, classification, disclosure, and cut-off. *Prerequisite Accounting 106 or permission of instructor.* Fall semester.

206 Intermediate Accounting II

3 credits. A continuation of 205. The principles of valuation, classification, disclosure, and cut-off applied to the various liability and owners' equity accounts as well as their related revenues and expenses. Topics include the study of various items affecting income determination, the statement of financial positions, and ratio analysis. *Prerequisite Accounting 205.* Spring semester.

301 Introduction to Federal Income Taxes

3 credits. A study of those provisions of the Internal Revenue Code which apply to individual taxpayers and sole proprietors. Students without a business background are encouraged to enroll.

302 Advanced Tax Accounting

3 credits. Further study of the Internal Revenue Code as it relates to partnerships, corporations, trusts and estates, and exempt organizations. State taxation of business is also covered. *Prerequisite Accounting 205, 301.* Spring semester.

305 Cost Accounting

3 credits. The quantitative aspects of managerial cost accounting, including cost-volume-profit analysis, budgeting, standard costs, and the concept of relevant costs. *Prerequisite Accounting 106 or 108; or permission of instructor.* Fall semester.

306 Advanced Cost Accounting

3 credits. A continuation of the managerial emphasis on cost accounting, including capital budgeting, inventory control, joint-and-by-product costing, and process cost accounting. *Prerequisite Accounting 305.* Spring semester.

308 Accounting for Non-profit Organizations

3 credits. An in-depth study of the principles and uses of fund accounting; includes the budgeting process, reporting requirements for general and special financial statements, and management's uses for control and decision-making as they relate to the general operating fund, as well as restricted and nonrestricted special funds. *Prerequisite Accounting 106 or 108.* Spring semester.

370-379 Special Problems

3 credits. A course designed to allow students to explore topics and problems of current relevance in accounting.

405 Auditing

3 credits. The legal and ethical responsibilities of an auditor, the methods and procedures used in gathering evidential material, and the auditor's report. *Prerequisite Accounting 206.* Fall semester.

406 Advanced Accounting

3 credits. A detailed study of accounting theory, income statement presentation, consolidations, partnerships, and foreign exchange accounting. *Prerequisite Accounting 206.* Fall semester.

409 Contemporary Problems for C.P.A.'s

3 credits. A capstone course in accounting designed to assimilate the widely varying aspects of public accounting and update the student in the latest standards and problems. *Prerequisite Accounting 302, 405, 406; or permission of instructor.* Spring semester.

471 Internship in Accounting

Variable credit. A series of work experiences in accounting with either a public accounting firm, a business firm, or governmental agency. *Prerequisite approval of Department Chairman.*

480-489 Independent Study

Variable credit. Designed to allow the student to do independent study and research on a problem or topic in the field of accounting. *Prerequisite approval of Department Chairman and Dean of the Faculty.*

499 Seminar in Accounting

3 credits. A study of selected topics currently under discussion in the accounting field. A major research project will be required. Offered upon student demand and faculty availability. *Prerequisite permission of instructor.*

BUSINESS ADMINISTRATION**215 Principles of Marketing**

3 credits. A study of the development and implementation of marketing strategies and practices with particular emphasis on the role of marketing in business and society. *Prerequisite Accounting 106 or 108, Economics 101, prerequisite or co-requisite Economics 102; or permission of instructor.*

248 Quantitative Techniques for Business

3 credits. Designed to develop familiarity with statistical and mathematical methods applicable to business; includes break-even analysis, Bernoulli and Bayesian probability, inventory models, and linear programming. *Prerequisite Mathematics 151, 117.*

265 Principles of Management

3 credits. A study of the process of using and coordinating technical and human resources in planning, organizing, staffing, motivating, and controlling to achieve an organization's objectives.

311 Principles of Marketing Research

3 credits. Employs scientific research methodology to solve marketing problems. Covers research design, data collection, sampling, and analysis. Stresses writing meaningful reports for management use. *Prerequisite Business Administration 215, Mathematics 151.* Fall semester.

312 Principles of Advertising

3 credits. Involves the creative and business management aspects of advertising, including campaign strategy, mass media, the advertising agency, creative techniques, advertising research, and social accountability. *Prerequisite Business Administration 215 or permission of instructor.* Spring semester.

313 Retailing Management

3 credits. A study of retailing institutions including institutional location, layout, managerial objectives and policies, consumer behavior, pricing and promotional strategies, consumer services, and expected trends. *Prerequisite Business Administration 215, 265.* Fall semester.

316 Marketing Management

3 credits. The formulation of overall marketing policies and the planning techniques for embodying these policies in marketing programs. Case analysis is stressed. *Prerequisite Business Administration 215, 248, 265.*

325 Business Finance

3 credits. Analyzes the management of funds of a business, including long and short-term sources of funds, capital budgeting, cash budgeting, ratio analysis, and capital markets. *Prerequisite Accounting 106 or 108.*

331 Business Law I

3 credits. Legal principles applicable to business with emphasis on contract law. Includes the growth of law as an institution. Fall semester.

332 Business Law II

3 credits. The study of legal principles applicable to business with emphasis on partnership, corporation, and property law. *Prerequisite Business Administration 331 or permission of instructor.* Spring semester.

333 Legal Problems in Business

3 credits. An examination of statutes, problems, and issues in selected areas of the law with attention to personal property, bailments, commercial paper, sales, and insurance. *Prerequisite permission of instructor.* Spring, 1981.

369 Behavioral Theory in Management

3 credits. A detailed examination of basic motivational theories, of behavioral models based on these theories, and the practical application of these models. *Prerequisite Psychology 105, Business Administration 265.* Fall semester.

370-379 Special Problems

3 credits. A course designed to allow students to explore topics and problems of current relevance in business.

424 Investments

3 credits. Emphasis on various classes of investments available to the investor; sources and uses of investment information, and security and marketing evaluation. *Prerequisite Business Administration 325.*

466 Operations Management

3 credits. A critical study of decision-making techniques, emphasizing the practical application of scientific methods to production activities; topics include resource allocation, production cycle, work simplification, plant layout, and process control. *Prerequisite Business Administration 248, 369, Economics 102.* Spring semester.

467 Personnel Administration

3 credits. Analysis of the principles, concepts and practices of procurement, development, maintenance, and utilization of personnel in organizations. *Prerequisite Business Administration 369.* Spring semester.

468 Industrial and Labor Relations

3 credits. Analysis of employment relationships; union philosophy, structure and function; collective bargaining, and the interrelated interests of management, union, workers, and the community. *Prerequisite Business Administration 467 or permission of instructor.* Fall semester.

471 Internship in Business

Variable credit. Work experiences designed to supplement course work. Students gain valuable knowledge and experience not available from textbooks. *Prerequisite approval of Department Chairman.*

480-489 Independent Study

Variable credit. Designed to allow the student to do independent study and research on a problem or topic in the field of business. *Prerequisite approval of Department Chairman and Dean of the Faculty.*

498 Seminar in Marketing

3 credits. Synthesizes the literature in consumer behavior, quantitative methods in marketing, and policy issues. *Prerequisite Business Administration 215 and permission of instructor.* Spring semester.

499 Seminar in Management

3 credits. Advanced study focusing on current management concepts and contemporary problems in the business enterprise. Various topics will be selected in the area of the students' interest. *Prerequisite Business Administration 248, 265, 369, and two other courses required for the management concentration; or permission of instructor.*

BUSINESS EDUCATION

101 Elementary Gregg Shorthand

3 credits. Introduction to Gregg Shorthand; instruction in theory, and in reading and writing shorthand rapidly and accurately. For students with no training in shorthand. Fall semester.

201 Intermediate Gregg Shorthand

3 credits. An intensive study of Gregg Shorthand; emphasis upon developing the student's ability to take dictation on unfamiliar material rapidly, and to transcribe accurately at the typewriter. *Prerequisite Business Education 101, 111; or permission of instructor.*

301 Advanced Gregg Shorthand

3 credits. A thorough review of shorthand theory, dictation and transcription practices. Emphasis given to methods and materials used in teaching shorthand in the secondary school. Enrollment limited to business education students. *Prerequisite Business Education 201, 212; or permission of instructor.*

111 Elementary Typewriting

3 credits. Fundamental typewriting techniques: machine operation, keyboard technique, letter forms, tabulation, manuscript form. For students with no formal training on the typewriter. Fall semester.

212 Intermediate Typewriting

3 credits. A concentrated training on the typewriter; business letters, special communication forms, technical papers, business reports, tables, business forms, executive communications, and application forms. *Prerequisite Business Education 111 or permission of instructor.* Spring semester.

311 Advanced Typewriting

3 credits. The building of production-level skill with emphasis given to methods and materials used in teaching typewriting in the secondary school. Enrollment limited to business education students. *Prerequisite Business Education 212 or permission of instructor.* Fall semester.

221 Mathematics for Business

3 credits. Review of fundamental processes, with emphasis on accuracy and speed in computations. These skills are applied to problem solving in personal and business situations. Enrollment limited to business education and medical secretarial students. Spring semester.

223 Business Communications

3 credits. Effective and functional written and oral business communications. Enrollment limited to business education and medical secretarial students. Fall semester.

370-379 Special Problems

3 credits. A directed learning experience designed to allow students to explore current topics of special relevance in the field of business education.

421 Office Practice

3 credits. The study of methods and materials for teaching secretarial procedures and business machines. Enrollment limited to business education students. *Prerequisite Business Education 111 or permission of instructor.* Fall semester.

305 Practicum in Secondary Education: Business (Education 305)

4 credits. Instructional methodology of business education and in-school experience integrated under the guidance of a clinical professor representing the academic major. *Prerequisite Education 215; corequisite Education 225e.*

472 Professional Internship, Secondary (Education 472)

16 credits. Student teaching in a secondary classroom. *Prerequisite Education 305.*

480-489 Independent Study

Variable credit. Designed to allow the student to do independent study and research on a problem or topic in the field of business education. *Prerequisite approval of Department Chairman and the Dean of the Faculty.*

COMPUTER SCIENCE

To fulfill the computer science concentrations in business administration and business education students generally choose from among the following computer science courses. However, for additional computer science listings and complete descriptions of all computer science courses see the computer science section of this catalog, page 55.

109 Introduction to COBOL Programming

1 credit. (5-week course). *Prerequisite Computer Science 105.*

121 Principles of Unit Record Processing

1 credit. (5-week course.)

125 Introduction to Computer Processing

3 credits. (Students who have passed Computer Science 106 will be given only 2 credits.)

209 Advanced COBOL Programming

1 credit. (5-week course) *Prerequisite* Computer Science 109.

309 Programming Business Applications

3 credits. *Prerequisite* Computer Science 209 or permission of instructor. Spring, 1981.

312 Systems Programming and Assembly Language

3 credits. *Prerequisite* Computer Science 105, 125. Spring semester.

341 Systems Analysis and Design

3 credits. *Prerequisite* Computer Science 125. Fall semester.

ECONOMICS**101 Principles of Economics I**

3 credits. (Core) The principles and problems of economics. Topics include supply and demand, the United States economic system, national income accounting, employment theory, fiscal policy, money and banking, and monetary policy. Does not fulfill Core requirement for students majoring in accounting, business administration or business education.

102 Principles of Economics II

3 credits. (Core) Continuation of 101. Topics include elasticity, consumer behavior, production costs, market structures (competition, oligopoly, monopoly), and resource pricing. Does not fulfill Core requirement for students majoring in accounting, business administration, or business education. *Prerequisite* Economics 101 or permission of instructor.

301 Intermediate Microeconomic Theory

3 credits. (Core) An in-depth study of corporate decision-making and resource allocation within the economic environment of free enterprise. *Prerequisite* Economics 101, 102, Mathematics 121 or 117. Spring, 1980.

302 Intermediate Macroeconomic Theory

3 credits. (Core) Development of macroeconomic theories of output, employment, inflation and growth, monetary and fiscal policies, and analysis. *Prerequisite* Economics 101, 102, Mathematics 121 or 117.

303 Money and Banking

3 credits. (Core) A study of the United States money and banking systems, including commercial banking, the Federal Reserve System, monetary theory and policy, interest rates, money markets. *Prerequisite* Economics 101, 102, or permission of instructor.

304 Public Finance

3 credits. (Core) An application of macro-economic theory to the problems of federal, state, and local taxation, expenditures and debt management. *Prerequisite* Economics 101.

306 Development of Economic Thought

3 credits. (Core) The historical and philosophical evolution of economic ideas and schools of thought from Smith, Ricardo, and Marx to Marshall and Keynes. Fall, 1980.

307 International Economics

3 credits. (Core) A study of the basic concepts of international trade, international payments, and commercial policy, combining economic theory, policy, and practice. *Prerequisite* Economics 101, 102, or permission of instructor. Fall, 1980.

308 Comparative Economic Systems

3 credits. (Core) Examination, criticism, and appraisal of alternative economic systems: capitalism, socialism, communism, and mixed economic systems. *Prerequisite* Economics 101 or permission of instructor.

309 Introduction to Mathematical Economics

3 credits. (Core) An application of algebra and elementary calculus to further elaborate economic concepts and problems. *Prerequisite* Economics 101, 102; Mathematics 121 or 117. Fall semester, 1979.

370-379 Special Problems

3 credits. (Core) A course designed to allow students to explore topics and problems of current relevance in economics.

480-489 Independent Study

Variable credit. (Core) Designed to allow the student to do independent study and research on a problem or topic in the field of economics. *Prerequisite* approval of Department Chairman and Dean of the Faculty.

HEALTH CARE

322 Health Laws, Issues, and Public Policies

3 credits. An examination of important laws, issues, and public policies pertinent to health care, with attention to regulatory authority, liability and social policy. *Prerequisite permission of instructor.* Spring, 1980.

MEDICAL SECRETARIAL SCIENCE

101 Medical Office Procedures

3 credits. Simulation approach to medical office procedures, office protocol, and the like. Enrollment limited to medical secretarial students. *Prerequisite Business Education 111, 223; or permission of instructor.* Spring semester.

109 Medical Accounting

3 credits. Examines standard record-keeping and bookkeeping for doctors and dentists; topics include financial statements and reports unique to the medical profession. Enrollment limited to medical secretarial students. Fall semester.

211 Medical Terminology

3 credits. Basic tools for building a medical vocabulary through acquaintance with medical terms in anatomy, physiology, and disease. Enrollment limited to medical secretarial students. Fall semester.

219 Medical Transcription

3 credits. Using Dictaphone equipment, the students transcribe a variety of medical records and histories. Enrollment limited to medical secretarial students. *Prerequisite Business Education 212, Medical Secretary 101; or permission of instructor.* Fall semester.

272 Practicum

6 credits. The student will be placed in a hospital, a doctor's office, a dentist's office, or some other health care facility for practical experience for a portion of the semester.

BUSINESS ADMINISTRATION

See Department of Business, page 44.

BUSINESS EDUCATION

See Department of Business, page 44.

DEPARTMENT OF CHEMISTRY

Professors Hedrick, Proctor (*Director of the Medical Technology Program*), Ranck, Spangler (*Chairman*)
Associate Professor Reeder
Assistant Professor Schaeffer

Bachelor of Science

Professional Accreditation: The Elizabethtown College Chemistry Department is on the approved list of the Committee on Professional Training of the American Chemical Society. The affiliation of Elizabethtown College with seven accredited hospitals is recorded with the National Accrediting Agency for Clinical Laboratory Sciences.

The chemistry programs contribute to both the science component and the professional component of that "genuinely pragmatic mixture" of studies that Elizabethtown College seeks to foster. Students may choose chemistry as part of their General Education Core requirement as an elective, or as a major area of study leading to a career which requires an in-depth knowledge of chemistry.

Students majoring in chemistry typically go on to graduate studies in chemistry or biochemistry, to hospital or industrial laboratories, to the study of medicine, to secondary education, or to sales positions in the chemical industry.

The Department offers two programs, one in chemistry and the other in chemistry/medical technology. There are five options within the chemistry program: the American Chemical Society approved professional chemistry curriculum, and the pre-medical, secondary school and general science certification, chemistry management, and chemical physics curricula. The American Chemical Society option prepares the student for graduate school or for a career in an industrial or government laboratory. The chemistry-management option prepares the student for a career in sales or management positions in the chemical or a related industry. Additional options may be tailored to the student's needs in consultation with the student's adviser and the Department Chairman. Students planning much work in chemistry should consult with a departmental adviser as early as possible to plan the sequence of courses in chemistry, mathematics, physics, language, and allied sciences which will be to their greatest advantage. Many upper-level chemistry courses have calculus and physics

courses as prerequisites, making their early completion desirable. The sequence for secondary education and general science certification also requires early planning to insure the proper spacing of education courses.

There are two options within the medical technology program offered in cooperation with hospital programs accredited by the American Medical Association's Committee on Allied Health and Accreditation (CAHEA). Most students choose the option requiring three years (100 semester hours) at Elizabethtown College plus a 12-month period of study at a hospital approved by the American Medical Association and Elizabethtown College. The degree is awarded upon the recommendation of the pathologist or program supervisor of the hospital and the program director of the College. Elizabethtown College is affiliated with Harrisburg Hospital, Polyclinic Hospital (Harrisburg), York Hospital, Lancaster General Hospital, St. Joseph Hospital (Lancaster), West Jersey Hospital (Voorhees, New Jersey), and Abington Hospital (Abington, Pennsylvania). The second option requires four years at Elizabethtown College followed by a clinical year, although the clinical year is not required for a degree from Elizabethtown College when this second option is chosen.

The A.C.S. approved option requires Chemistry 101, 102, 201, 202, 341, 343, 344, 351, 352, 402, 421, and 451 (or 491); Computer Science 105, 106, 108; Mathematics 201, 222 (competency); Physics 232 (competency); and Modern Language (German preferred, or French or Russian) 202 (competency).

The pre-medical option requires Chemistry 101, 102, 201, 202, 341, 343, 344, 351, 352; Biology 111, 112, and two advanced courses in biology; Mathematics 222 (competency); Physics 231 (competency); Computer Science 105, 106, 108; Modern Language (German preferred, or French or Russian) 202 (competency); and four additional credits selected from biology and chemistry.

The secondary education option requires Chemistry 101, 102, 201, 202, 341, 343, 344, 351, and 352; Computer Science 105, 106, 108; Mathematics 222 (competency); Physics 231 (competency); Modern Language (German preferred, or French or Russian) 202 (competency); Psychology 105; Education 215, 305, 225d, 225e, 472. The Department also participates in the general science certification program; for a detailed listing consult the interdisciplinary section of this catalog, page 89.

The chemistry-management option requires Chemistry 101, 102, 201, 202, 341, 343, 344, 351, 352; Computer Science 105, 106, 108; Mathematics 222 (competency); Physics 231 (competency); Modern Language (German preferred, or French or Russian) 202 (competency); Accounting 107; Business Administration 215, 325, 332, 265, 369, 466; Economics 101, 102.

The chemical physics option requires Chemistry 101, 104, 201, 341 (or Physics 403), 343, 344, 351, 352; Modern Language (German preferred, or French or Russian) 202 (competency); Computer Science 105, 106, 108; Mathematics 201, 222 (competency); 321 or 362; Physics 232, 344; plus two courses (minimum of seven semester hours) from a specified group of chemistry, mathematics, and physics courses.

The medical technology three-year option requires Chemistry 101, 102, 201, 202, 305, 325, (315 recommended); Biology 111, 112, 235, 341, and one of the following: 541, 215, 201, 352, 324, or 202; Physics 203; Mathematics 101 or 121. In this option Mathematics 101 or 121 is defined as meeting the Core requirement for mathematics instead of the six credits normally required. Core and electives must total 100 semester hours. The clinical year requires a minimum of 28 additional semester hours. The four-year medical technology option also requires Chemistry 315, Mathematics 151, and one additional course in biology.

101 General Chemistry

4 credits. (Core) A study of the principles of chemistry from the viewpoint of modern theory of atomic and molecular structure. Hours: lecture 3, laboratory 3. *Prerequisite high school algebra or equivalent.* Fall semester.

102 General Chemistry

4 credits. (Core) For students who plan to take additional courses in chemistry. Treats in detail the principles of chemical equilibria in aqueous solution. Hours: lecture 3, laboratory 3. *Prerequisite Chemistry 101.* Spring semester.

104 General Chemistry

4 credits. (Core) For students who will take no further chemistry. Includes basic treatment of organic chemistry, biochemistry, and other selected topics which are treated in depth in advanced courses. Hours: lecture 3, laboratory 3. *Prerequisite Chemistry 101.* Spring semester.

201 Organic Chemistry

4 credits. (Core) A study of the compounds of carbon, aliphatic and aromatic, their properties, synthesis, structures, and uses. Also includes mechanisms of their reactions and the application of instrumental methods in this area of chemistry. Hours: lecture 3, laboratory 3. *Prerequisite Chemistry 102.* Fall semester.

202 Organic Chemistry

4 credits. (Core) A continuation of 201, including some basic biochemistry. *Prerequisite Chemistry 201.* Spring semester.

305 Quantitative Analysis

4 credits. (Core) Principles and practices of chemical analysis by gravimetric, volumetric, colorimetric, and instrumental methods. Methods and determinations chosen to be appropriate to the student's major. Hours: lecture 2, laboratory 8. *Prerequisite Chemistry 102, Mathematics 101 or equivalent.*

315 Instrumental Analysis

4 credits. (Core) Analysis with modern instruments and techniques, chiefly spectrophotometry, potentiometry, gas chromatography, and electronics. Emphasis on chemical and physical theories that make instrumental methods useful. Hours: lecture 2, laboratory 8. *Prerequisite Chemistry 102, Mathematics 101 or equivalent.*

325 Biochemistry

4 credits. (Core) An introduction to the chemistry of living matter, treating some of the principles required to understand the structures, properties, and metabolism of proteins, lipids, carbohydrates, and nucleic acids, and some of the experimental techniques used. Hours: lecture 2, laboratory 6. *Prerequisite Chemistry 202; and 305 or 351.*

333 Computer Systems Interfacing (Computer Science 333, Physics 333)

3 credits. Digital logic and integrated circuits to implement logic; architecture and machine language; programming minicomputers and microprocessors; design, testing, and construction of instrument-to-computer and computer-to-computer interfaces; design and testing of supporting software. Hours: lecture 1, laboratory 6. Fall semester.

341 Chemical Equilibrium and Kinetics

3 credits. (Core) An introduction to thermodynamics as applied to chemical equilibria in ideal and non-ideal, homogeneous and heterogeneous systems. Also includes ionic solutions, electrochemistry and rate equations, and their molecular basis. *Prerequisite Chemistry 102, Mathematics 222, Physics 231.* Fall semester.

343 Introduction to Quantum Theory (Physics 343)

3 credits. (Core) An introduction to the principles of quantum theory, radiation atomic spectra, and the extranuclear structure of the atom. *Prerequisite Chemistry 102, Mathematics 222, Physics 232.* Fall semester.

344 Chemical Bonding and the Structure of Matter

3 credits. (Core) Includes ionic bonding, the valence bond, and molecular orbital theories of covalent bonding and intermolecular forces; spectroscopic and diffraction methods of determination of molecular structure; liquid and solid states of matter. *Prerequisite Chemistry 343.* Spring semester.

351 Advanced Chemistry Laboratory I

4 credits. (Core) See description following 451. Hours: lecture 2, laboratory 8. *Prerequisite Chemistry 202, Computer Science 105; corequisite Chemistry 341.* Fall semester.

352 Advanced Chemistry Laboratory II

4 credits. (Core) See description following 451. Hours: lecture 1, laboratory 12. *Prerequisite Chemistry 351; corequisite Chemistry 343.* Spring semester.

451 Advanced Chemistry Laboratory III

4 credits. (Core) Hours: lecture 0, laboratory 16. *Prerequisite Chemistry 352.* Fall semester.

Chemistry 351, 352, 451 is a sequence of courses integrating synthetic, analytical, physical, organic, inorganic, biochemical, and radiochemical laboratory practices. Individual problems may require from three to ten weeks. The chemical literature, digital computers, and statistical methods are introduced during the first semester and used extensively thereafter. Use of modern instrumentation such as the infrared spectrophotometer, gas chromatograph, x-ray diffractometer, and NMR spectrometer is provided on an individual basis. By the time students have completed Chemistry 451 they should be familiar with the basic laboratory practices appropriate for chemists at the bachelor's level.

371-380 Special Topics in Chemistry

Variable credit. (Core) Study of an advanced topic, experimental or theoretical, of special interest to the student. *Prerequisite permission of instructor and Department Chairman.*

402 Advanced Inorganic Chemistry

3 credits. (Core) Study of the elements and their compounds based upon atomic and molecular structures. *Prerequisite Chemistry 344.* Spring semester.

421 Advanced Organic Chemistry

3 credits. (Core) A study of organic reactions based on experimental and advanced theoretical studies. *Prerequisite Chemistry 202, 344.* Fall semester.

460-469 Clinical Courses in Medical Technology

28 credits (minimum). Instruction during the clinical year will cover the areas of chemistry (urinalysis), pulmonary function (radioisotopes), microbiology (parasitology, mycology, serology, virology), and hematology (coagulation, blood bank). Lectures in medical ethics, management, medical terminology, laboratory mathematics, and anatomy may be given. Experience in the various clinical laboratories is also provided. Each hospital school of medical technology varies slightly in its course descriptions, but in most cases they are available from the program director. *Prerequisite admission to the medical technology school of the cooperating hospital.*

491 Research in Chemistry

Variable credit. (Core) An original experimental or theoretical investigation under the close supervision of a faculty member. Experimental design and a written report are required. *Prerequisite permission of instructor.* Fall semester.

492 Research in Chemistry

Variable credit. (Core) Same as 491. *Prerequisite permission of instructor.* Spring semester.

Education 305 Practicum in Secondary Education: Science

3 credits. Teaching science in secondary schools. *Prerequisite Education 215; corequisite Education 225e.*

DEPARTMENT OF COMMUNICATION ARTS

Associate Professors Riley, Smith (*Chairman*)
Assistant Professor Sederholm

Bachelor of Arts

The Communication Arts Department offers courses in broadcasting, journalism, speech, and theatre with the aim of assisting students to develop their ability to communicate effectively in a democratic society and to build meaningful and productive lives on personal, interpersonal, and public levels. Career possibilities include positions in advertising, sales, public relations, business and industrial communications, broadcasting, theatre, newspaper and magazine writing, and reporting. The Department offers college-wide activities, including play production, speech activities, and radio broadcasting with WVEC, the campus radio station. All majors are expected to participate actively in the various extra-curricular activities sponsored by the Department.

The 42 credit hours required for a Bachelor of Arts in Communication Arts include Communication Arts 105, 141, 151, 231, plus 15 hours of electives within the Department. The remaining 15 hours must be at the 200-level or above and should be taken from other college departments (preferably in business, social sciences, or humanities), from courses completely within the Department, or a combination thereof. Prior to their senior year majors are required to submit *in writing* to their advisers a list of courses intended to fill this 15-hour requirement.

Every major must observe the following requirements. Students are required to maintain an overall 2.0 G.P.A. in the major. Students may not count a course towards requirements of the major and also towards requirements for the General Education Core: one course may fulfill only one requirement. The student is advised that the 12 hours of electives in the General Education Core should be taken in upper-level courses (200 or above) from the departments specified in the General Education Core; no survey (100-level) courses are permitted.

BROADCASTING**141 Introduction to Mass Communication**

3 credits. An examination of the impact of mass media on society. Fall semester.

248 Writing for Radio

3 credits. A basic course introducing the varied kinds of on-air writing and the various production techniques used within the radio industry. *Prerequisite (applies only to majors) Communication Arts 141.* Spring semester.

341 Writing for Television

3 credits. A basic course introducing the varied kinds of on-air writing within the television industry. *Prerequisite (applies only to majors) Communication Arts 141.* Fall, alternate years.

343 Broadcasting I: Radio

3 credits. An examination of the use and management of radio energy, the general technical and social history of radio, the economics of radio broadcasting, the social controls placed on radio. *Prerequisite Communication Arts 141.* Fall, alternate years.

344 Broadcasting II: Television

3 credits. An examination of the use and management of radio energy as it relates to television, the general technical and social history of television, the economics of television broadcasting, the social controls placed on television, and the influence of television and radio upon our lives. *Prerequisite Communication Arts 141, 343.* Spring, alternate years.

440 Radio-Television Production

3 credits. Principles and theories of advanced radio and television production, featuring commercial, news, documentary, special events, and dramatic programming. May be taken twice with permission of instructor. *Prerequisite Communication Arts 248, 341, or permission of instructor.* Spring, alternate years.

JOURNALISM**231 Basic Reporting and Newswriting**

3 credits. An introductory study of news media and values, with emphasis on effective reporting through the analysis of writing and news stories. *Prerequisite Business Education 111, or a knowledge of typing, or permission of instructor.* Fall semester.

Note: Please consult each semester's class schedule for additional course offerings in journalism in the Communication Arts 370 series.

SPEECH**105 Basic Speech**

3 credits. Basic instruction in developing poise and confidence in speaking, with emphasis on the speaker's personality, voice, diction, and body movement; fundamentals of speech preparation.

206 Persuasion

3 credits. A study of the theory and techniques of persuasion from the perspective of the persuader and of his audience; topics include the ethics, social responsibility, and motivation of persuasion; the techniques of nonverbal communication and mass appeals. *Prerequisite Communication Arts 105 or permission of instructor.* Spring semester.

THEATRE**151 Invitation to the Theatre**

3 credits. (Core) Theatre as a social experience—its people, its genre, and its current role in our society. Trips to area productions, paid for by students, will be an essential part of the course. Fall semester.

167 Oral Interpretation

3 credits. (Core) The theory and practice of communicating prose and poetry to the listener through vocal and bodily techniques, tone, point-of-view, rhythm, and pace. Fall semester.

252 Theatre History

3 credits. (Core) The development of Western and American theatre with emphasis on plays, playwrights, actors, and theatre designers. Spring semester.

257 Stagecraft and Lighting

3 credits. (Core) The technique and theory of staging and lighting a theatre production; topics include set construction and current lighting effects. Course may be offered either semester, depending upon departmental needs.

268 Basic Acting

3 credits. (Core) Theory and practice in current acting methods. Students will be expected to participate in a number of class projects involving the memorization of parts. *Prerequisite (applies only to majors) Communication Arts 167.* Fall semester.

350-359 Studies in Theatre Production

3 credits. (Core) Includes such courses as Scene Design and Lighting, Readers' Theatre, Drama Production, Acting II, and Directing. Courses will be taught on the basis of student demand and faculty interest. *Prerequisite permission of instructor.*

GENERAL**370-379 Special Problems / Seminars in Communication Arts**

Variable credit. A course designed to allow the student to pursue topics of special relevance.

470-479 Practicum and Internship

Variable credit. Instruction on an individual basis for credit from the communication arts faculty or other qualified professionals in the student's chosen field: speech, theatre, broadcasting, or journalism. *Prerequisite permission of the Chairman of the Department.*

480-489 Independent Study in Communication Arts

Variable credit. Designed to give a student the opportunity to work in an area of major interest under the guidance of members of the communication arts faculty. *Prerequisite permission of instructor.*

**PROGRAM IN
COMPUTER SCIENCE**

Chairman of the Program

Professor Ranck

Instructor Tulley

Other instructors in computer science are drawn from college departments.

The advent of high-speed machines with enormous capacity for the gathering, processing, storage, retrieval, and communication of information has affected nearly every aspect of our professions and our daily lives. Courses in computer science encourage the exploration and understanding of this social and technological phenomenon at several levels. Survey courses are provided for those who wish to understand in broad social contexts the nature of the computer and its effect on our lives and on society. Programming and language courses are provided for those who need to become skillful users of the computer. Advanced study in theory, hardware, software, and applications is provided for those who want to use the computer effectively and knowledgeably in another discipline. Advanced courses are designed to relate closely to the curricula in business, the natural and social sciences, engineering, and mathematics, and students are encouraged to develop simultaneous strengths in computing and in a discipline in which the computer is used as a tool. These advanced courses also serve those who wish to pursue graduate study in computer science.

105 Timesharing Concepts

1 credit. (5-week course) Introduction to the time-sharing use of computer systems and to system components, including a study of text editors for creating and editing user files.

106 BASIC Programming

1 credit. (5-week course) Introduction to language concepts necessary to write simple programs in BASIC (Beginners' All-purpose Symbolic Instruction Code), a language suited for timesharing. Students planning to take Computer Science 125 should not enroll in this course. *Prerequisite Computer Science 105 or permission of instructor.*

108 Introduction to FORTRAN Programming

1 credit. (5-week course) An introduction to the FORTRAN (FORmula TRANslation) language, statements, and features with emphasis on its use in algorithmic problem-solving. *Prerequisite Computer Science 105.*

109 Introduction to COBOL Programming

1 credit. (5-week course) An introduction to COBOL (the COmmon Business Oriented Language) and its use in solving business problems. *Prerequisite Computer Science 105*

121 Principles of Unit Record Processing

1 credit. (5-week course) A study of data processing using unit record equipment. Discussion of various types of equipment with emphasis on the keypunch and sorter. Enrollment limited to business education students. Offered on demand only.

125 Introduction to Computer Processing

3 credits. An overview of computers in our society, including their history, components, logic, and uses, and a thorough study of BASIC programming concepts. (Students who have passed Computer Science 106 will be given only 2 credits.)

208 Advanced FORTRAN Programming

1 credit. (5-week course) A continuation of 108. Examines the advanced features of the language with emphasis on advanced input/output techniques, file handling and plotting. *Prerequisite Computer Science 108*. Spring semester.

209 Advanced COBOL Programming

1 credit. (5-week course) A continuation of 109. Continues the study of COBOL; topics include perform statements, table handling techniques, and file handling concepts. *Prerequisite Computer Science 109*

309 Programming Business Applications

3 credits. An advanced study of COBOL features including ISAM, Report Writer, and SORT. Several programming assignments illustrate the sophisticated use of language in the business environment. *Prerequisite Computer Science 209 or permission of instructor*. Spring, 1981.

312 Systems Programming and Assembly Language

3 credits. In-depth study of assembly level languages including SIMBAL and MACRO-10; topics include the functions, overall structure, and logic of various systems programs. *Prerequisite Computer Science 105, 125*. Spring semester.

333 Computer Systems Interfacing (Chemistry 333, Physics 333)

3 credits. Digital logic and integrated circuits to implement logic; architecture and machine language programming of mini-computers and microprocessors; design, testing, and construction of instrument-to-computer and computer-to-computer interfaces; design and testing of supporting software. Fall semester.

341 Systems Analysis and Design

3 credits. Analysis and design of computer-based and manual systems, including a study of information requirements, design approaches, processing methods, and data management systems. *Prerequisite Computer Science 125*. Fall semester.

370-379 Special Problems

3 credits. A course designed to allow students to explore topics and problems of current relevance in computer science. *Prerequisite permission of instructor*.

413 Systems Simulation

3 credits. Introduction to simulation techniques, stochastic processes, queuing theory, optimization models and data analysis using both a higher-level programming language and specialized simulation languages. *Prerequisite Computer Science 106 or 125, 108; Mathematics 151 or 351; or permission of instructor*. Spring, 1980.

471 Internship in Computer Science

Variable credit. Work experiences designed to supplement course work. By working for business, school, or government, the student gains valuable knowledge unavailable from textbooks. *Prerequisite approval of Department Chairman*.

480-489 Independent Study

Variable credit. Designed to allow the student to do independent study and research on a problem or topic in the field of computer science. *Prerequisite approval of Department Chairman and Dean of the Faculty*.

DRAWING

See Department of Physics and Earth Sciences, page 78.

EARTH SCIENCE

See Department of Physics and Earth Sciences, page 78.

ECONOMICS

See Department of Business, page 44.

DEPARTMENT OF EDUCATION

Professors Ziegler, Rice (*Chairman*)
Associate Professors Bowers, Callenbach, Fox
Assistant Professor Gaver

Bachelor of Science

The Department offers three major certification programs—Early Childhood (N–3), Elementary, (K–6), and Secondary (7–12)—which seek to combine a strong liberal arts education with the development of high professional competence. Complementing the General Education Core and, in secondary certification, the student's academic major, the certification programs bring together in a creative way the student, the school, and the subject to be taught. The Department further stresses the importance of supervised field experiences which complement on-campus courses in education.

While elementary and secondary certification are familiar to most people, early childhood education (leading to a nursery-kindergarten-primary 1–3 teaching certification) is a relatively new field and warrants further explanation. Encompassing the education of the child from birth to eight years of age, the early childhood program prepares individuals to teach in nursery school, kindergarten, and grades 1–3 in both public and private schools, and in child-care programs such as Day Care, Child Development, and Child Welfare centers, the Head Start and Follow Through programs, and so forth.

ADMISSION TO TEACHER EDUCATION PROGRAM

All applicants who plan to teach must, by the time they have completed Education 205 or 215, file a written application for admission to the Teacher Education Program and meet the qualifying criteria of the Department of Education: proficiency in English and speech, good physical and mental health, a grade point average of at least 2.0, approval of the Office of Student Affairs, satisfactory evaluation and recommendation by the members of the Department of Education, approval by the major department of prospective secondary school majors.

Note: Students who fail to meet these criteria as applicants, or who later fail to maintain satisfactory progress, are counseled out of the program and directed into other areas of endeavor.

PROGRESS TOWARD PROGRAM COMPLETION

1. Students are evaluated at the conclusion of each semester after admission into the program, and may be advised to withdraw at any time the Department determines that withdrawal is in the best interests of the College, the program, and the student.
2. Any grade below C in the teaching major after completion of the 100-level courses will disqualify a student from certification.
3. Students should apply for certification during the semester in which they will graduate. Should they apply after they have graduated, they must satisfactorily complete whatever additional requirements are in effect before they can receive certification.

CERTIFICATION PROGRAM REQUIREMENTS

The Secondary Certification Program (accompanied by the bachelor of art or bachelor of science degree, depending on the student's academic major)

- A. General Education Core as detailed by the College.
- B. Academic major as outlined by each program area which supports a certification program: business education, English, modern language, mathematics, science and general science, social studies.
- C. Professional education requirements: Education 215, 225d, 225e, 305, 472.

The Elementary Education Major (bachelor of science degree)

- A. General Education Core as detailed by the College. Psychology 225 must be taken as part of the social science Core requirement.
- B. Professional education requirements: Education 205, 225a–c, 235, 325, 335, 355, 365, 471, 490–498 (6 credits); Mathematics 211, 212; Psychology 225; Physical Education 285; Music 325, 326.
- C. Electives

The Early Childhood Education Major (bachelor of science degree)

- A. General Education Core as detailed by the College. Psychology 225 must be selected as part of the social science Core requirement.
- B. Professional education requirements: Education 205, 225a–c, 235, 315, 320, 325, 335, 355, 365, 471, 490–498 (6 credits); Mathematics 211, 212; Physical Education 285; Music 325, 326.
- C. Electives

205 Foundations of Education

4 credits. A study of some of the historical, philosophical, sociological, and psychological foundations of education. *Prerequisite* Psychology 105.

215 Introduction to Secondary Education

4 credits. Theory and problems of secondary education including in-school participation. *Prerequisite Psychology 105; corequisite Education 225d.*

Note: Admission to the Teacher Education Program is a prerequisite to any other education course.

225 a-e Education Practicum

Variable credit. Provides instruction in media, and experience in the preschool, elementary, or secondary classroom. The practicum and its corequisite courses integrate classroom experience with on-campus study.

235 Fundamentals of Reading Instruction

3 credits. An introduction to the systematic assessment and teaching of the basic reading skills: word recognition, word analysis, and comprehension skills. *Prerequisite 205; corequisite Education 225b.*

305 Practicum in Secondary Education

4 credits. The instructional methodology of an academic discipline is integrated with in-school experience under the guidance of a clinical professor in the academic major: business education, English, mathematics, modern language, science and general science, social studies. *Prerequisite Education 215; corequisite Education 225e.*

310 History of Science

1 credit. A study of developments in science from the ancient Greeks to the twentieth century. *Prerequisite permission of instructor*

315 Early Childhood Education

4 credits. A study of programs from preschool through grade 3, emphasizing the setting, the child, and the special needs and approaches of early childhood education. On-campus study is coordinated with the experiences of observing and participating in early childhood settings. *Prerequisite Education 235, Psychology 225.* Fall semester.

320 Special Methods in Early Childhood Education

4 credits. Integrates early childhood materials and methods into the framework of the pre-operational child. *Prerequisite Education 315; corequisite Education 325, 335, 355, 365.* Spring semester.

325 Science for Early Childhood / Science for Elementary Education

3 and 4 credits, respectively. A study of science concepts, procedures, and materials for the preschool and elementary child. *Prerequisite Education 315 (early childhood); 235 (elementary).*

335 Mathematics for Early Childhood / Mathematics for Elementary Education

3 and 4 credits, respectively. A study of mathematics concepts, procedures, and materials for the preschool and elementary child. *Prerequisite Education 315 (early childhood); 235 (elementary).*

355 Language Arts and Reading for Early Childhood / Language Arts and Reading for Elementary Education

3 and 4 credits, respectively. A study of concepts, procedures, and materials in language arts and reading for the preschool and elementary child. *Prerequisite Education 315 (early childhood); 235 (elementary).*

365 Social Studies for Early Childhood / Social Studies for Elementary Education

3 and 4 credits, respectively. A study of social studies concepts, procedures, and materials for the preschool and elementary child. *Prerequisite Education 315 (early childhood); 235 (elementary).*

371-380 Special Problems in Education

Variable credit. Topics chosen in response to student and faculty interests. *Prerequisite permission of instructor.*

471 Professional Internship, Early Childhood and Elementary

16 credits. Student teaching in an early childhood and/or elementary classroom. *Prerequisite Education 325, 335, 355, 365; additionally, for early childhood, Education 320.*

472 Professional Internship, Secondary

16 credits. Student teaching in a secondary classroom. *Prerequisite Education 305.*

480-489 Independent Study

Variable credit. Upon the initiative of the student, a program of study may be organized with a faculty member on a topic of mutual interest.

490-498 Special Topics

Courses designed to give students opportunity to pursue work in an area of major interest in such topics as art in the elementary school, creativity, computers in education, children's literature, developmental reading.

DEPARTMENT OF ENGLISH

Professors Dwyer (*Chairman*), J. Campbell
Associate Professors Black, Russell
Assistant Professor Sarracino
Instructors Behrendt, Taylor

Bachelor of Arts

The Department of English offers an education which stresses the knowledge and effective use of language and the understanding and appreciation of our literary heritage. Excellence in both writing and literary studies is the fundamental aim of the General Education courses and of the rigorous and comprehensive program which prepares majors for graduate training in English or professions such as law and medicine, for teaching at the secondary level, or for the many vocations which recognize the necessity for a sensitivity to language and its effective use.

The Department offers a major in English with the additional option of certification for the teaching of English at the secondary school level. English majors are required to take English 105, 241, 242, 394, two semesters of American literature; one course in literary forms (all English courses with the middle digit 1); two courses in literary movements (all English courses with the middle digit 2); one course in individual authors (all English courses, except English 339, with the middle digit 3); and an additional 12 hours of electives in English (excluding English 021 and 100).

Students wishing to be certified to teach English on the secondary level have these additional requirements: English 100 (which counts toward the English elective hours for certification candidates only), 383 and 344; Psychology 105; Education 215, 225d, 225e, 305, and 472.

021 Basic English (Developmental Studies 021)

2 credits. A study of the basic skills of writing (grammar, usage, mechanics) with emphasis upon paragraphing. Graded pass/no pass.

100 Expository Writing

3 credits. (Core) A course in the principles of writing compositions in expository and persuasive discourse.

105 Introduction to Literature

3 credits. (Core) A study of the short story, novel, drama, and verse, intended to develop the student's ability to analyze, evaluate, and appreciate literature. Prerequisite to all literature courses.
Prerequisite English 100 or its exemption.

213 Analysis of Poems

3 credits. (Core) Intensive training in reading the individual poem accurately and sensitively. *Prerequisite English 105* Fall, alternate years.

241 Literary History of Britain I

3 credits. (Core) A survey of the development of British literature from Old English poetry through Milton. Required for majors. *Prerequisite English 105; permission of instructor for non-majors* Fall semester.

242 Literary History of Britain II

3 credits. (Core) A survey of British literature from the Restoration to World War II with emphasis on the neoclassic, Romantic, and Victorian periods. Required for majors. *Prerequisite English 105; permission of instructor for non-majors.* Spring semester.

312 English Drama Before 1900

3 credits. (Core) A study of representative English plays, excluding Shakespeare, from the Middle Ages to the twentieth century, emphasizing Elizabethan and Jacobean drama. *Prerequisite English 105.* Fall, alternate years.

313 Modern Drama

3 credits. (Core) A study of drama from the realism of Ibsen through naturalism, expressionism, and symbolism to the current "avant garde" theatre. *Prerequisite English 105* Spring semester.

314 The English Novel Before 1900

3 credits. (Core) A study of selected masterpieces from Defoe to Hardy as works of prose art and as turning points in the development of the form. *Prerequisite English 105.* Spring, alternate years.

317 Modern Novel

3 credits. (Core) A study of the work of major novelists of the twentieth century with emphasis upon the development of the novel as an art form. *Prerequisite English 105* Fall semester.

318 Modern Poetry

3 credits. (Core) A study of at least three major twentieth-century poets as well as selections from writers who have published within the last 30 years. *Prerequisite English 105* Spring semester.

320 Concepts of the Renaissance

3 credits. (Core) A study of the "ruling ideas" of the Renaissance in Britain; representative non-dramatic writers with an emphasis on Spenser. *Prerequisite English 105.* Spring, alternate years.

322 The Seventeenth Century

3 credits. (Core) A study of the major non-dramatic writers, excluding Milton, from 1600 to 1660: among them, Donne, Jonson, Herbert, and selected prose writers. *Prerequisite English 105.* Fall, alternate years.

323 The Restoration and Eighteenth Century

3 credits. (Core) A study of the poetry and prose from 1660 to 1800 with an emphasis on Dryden, Swift, Pope, Sterne, and Johnson. *Prerequisite English 105.* Fall, alternate years.

327 The Romantic Movement

3 credits. (Core) A study of selected poetry and prose most significantly embodying the central concepts and achievements of English Romanticism. *Prerequisite English 105.* Fall semester.

328 The Victorian Period

3 credits. (Core) A study of selected poetry and prose from Tennyson to Hardy particularly emphasizing the changing responses of the artist to the conflicts stemming from the industrialization of the period. *Prerequisite English 105.* Spring, alternate years.

331 Chaucer

3 credits. (Core) A study of representative works of Chaucer. *Prerequisite English 105.* Fall, alternate years.

332 Shakespeare

3 credits. (Core) A study of representative works of Shakespeare. *Prerequisite English 105.* Spring, alternate years.

333 Milton

3 credits. (Core) A study of representative works of Milton. *Prerequisite English 105.* Spring, alternate years.

337 Eighteenth-Century English Authors

3 credits. (Core) A study of representative works of one or two major authors such as Pope, Swift, Fielding, and Goldsmith. *Prerequisite English 105.* Fall, alternate years.

338 Nineteenth-Century English Authors

3 credits. (Core) A study of representative works of one or two major authors such as Blake, Keats, Dickens, and Hardy. *Prerequisite English 105.* Fall, alternate years.

339 American Authors

3 credits. (Core) A study of the writings of one or two American authors such as Melville, James, Whitman, and Faulkner. Satisfies American literature rather than major author requirement for

English majors. *Prerequisite English 105.* Spring, alternate years.

340 The American Romantic Movement

3 credits. (Core) A study of American Transcendentalism, including its sources, and of major figures of the period such as Hawthorne, Melville, Whitman, Emerson, and Thoreau. *Prerequisite English 105.* Fall, alternate years.

341 The Rise of Realism in American Literature

3 credits. (Core) A study of American literature in the late nineteenth and early twentieth centuries with emphasis on such writers as Dickinson, Clemens, Robinson, Frost, Dreiser, and Fitzgerald. *Prerequisite English 105.* Spring, alternate years.

342 Experimentalism in American Literature

3 credits. (Core) A survey of major American writers of the last 50 years, authors such as Pound, Eliot, Faulkner, Williams, Stevens, Jeffers, Moore, and Nabokov. *Prerequisite English 105.* Fall, alternate years.

344 Methods Seminar in Teaching Language and Composition

3 credits. The teaching of English grammar and usage, with reference to teaching composition at the secondary school level; practical application of various methodologies through tutoring internships in the Writing Laboratory. *Prerequisite to professional semester.* Spring semester.

352 Fantasy in Literature

3 credits. (Core) A study of major works of fantasy (*Alice in Wonderland*, *The Hobbit*, *The Little Prince*, and others) focusing on the thematic significance of "the journey." *Prerequisite English 105.* Spring, alternate years.

357 Women and Literature

3 credits. (Core) A study of the effects on women writers and readers of a male dominated literary tradition. *Prerequisite English 105.* Fall, alternate years.

370-379 Special Problems

3 credits. Courses involving specific subjects chosen in response to student-faculty interest. *Prerequisite English 105.*

381 Creative Writing (Verse)

3 credits. A course for the writing of original verse and an understanding of the craftsmanship involved. Graded pass, no-pass. *Prerequisite permission of instructor.* Fall, alternate years.

382 Creative Writing (Prose)

3 credits. A course to instruct the student on the production of original works of prose and to acquaint him with literary terminology. Graded pass, no-pass. *Prerequisite permission of instructor.* Spring, alternate years.

383 Advanced Composition

3 credits. An analysis of the language of literature, politics, and social change to refine the student's resources in becoming a sophisticated writer; research methods, critical analysis, and extensive writing. *Prerequisite permission of instructor.* Fall semester.

394 English Seminar

3 credits. A seminar for English majors including research techniques, a research project, and introductions to classical, Biblical, linguistic, and critical backgrounds for English studies. Required for majors. *Prerequisite English 105; permission of instructor for non-majors.* Spring semester.

480-489 Independent Studies in English

2-3 credits. A course designed to give the individual student the opportunity to pursue work in an area of major interest under the guidance of a member of the Department of English. See the Department Chairman for registration instructions.

Education 305 Practicum in Secondary Education: English

4 credits. The exploration and application of various teaching styles and strategies in the teaching of literature in the secondary school English classroom; in-school observations and internships as paraprofessional experience. *Prerequisite Education 215; corequisite Education 225e.*

FRENCH

See Department of Modern Languages, page 66.

GEOGRAPHY

See Department of History, page 61.

GERMAN

See Department of Modern Languages, page 66.

DEPARTMENT OF HISTORY

Professors Kreider (*Chairman*), Mumford
Associate Professors Winpenny, Vassady
Assistant Professor Poole

Bachelor of Arts

History, the inquiry into the deeds and thoughts of man's past, is a valuable and enjoyable basis for a liberal education. The student of history invariably acquires, through this vicarious experience, a better perspective which can lead to sound judgment and wise decisions. Furthermore, an understanding of the repetitive and complex nature of man's perennial problems produces in the student a healthy sophistication and a steady self-confidence which help to dissolve the uncertainties of modern man's attempt to live entirely in the present through seeking relevance in fleeting moments which quickly glide into the past.

The Department's program is designed to prepare students for further study in graduate programs in history, theology, museum studies, library science, government, and law; or for careers in teaching, government service, and business.

The history major requires the student satisfactorily to complete 39 hours of work in history, including History 105 (or its equivalent) and 390. One is required to select nine hours in United States history; nine hours in European history, and six hours in non-United States, non-European courses.

History is one of the major areas both in the social studies major, which prepares a student for certification to teach in secondary schools, and in the interdisciplinary social science major. Students with interests in either area should consult the detailed descriptions in the interdisciplinary section of this catalog, page 89.

It is possible for the student to acquire a Bachelor of Arts in History as a history major and receive certification in the social studies. For further explanation, contact a member of the History Department.

Combinations which allow the student a major and training for other careers are possible. For example, one may major in history and also take a recommended program of courses in business. Consult the Department for other options in combination with communication arts, political science, or other program areas.

105 Topics in the History of Western Civilization

3 credits. (Core) A highly selective approach to the long-range developments and to the major problems of our Western heritage.

201 History of the United States to 1877

3 credits. (Core) A narrative account and analysis of the social, political, economic, and diplomatic forces that have shaped the American experience from the earliest colonial settlements through the end of post-Civil War Reconstruction—roughly 1877.

202 History of the United States since 1877

3 credits. (Core) A narrative account and analysis of the social, political, economic, and diplomatic forces that have shaped the American experience from the beginning of Reconstruction—roughly 1865—through the resignation of Richard Nixon.

205 Modern Far East

3 credits. (Core) A general survey of China, Japan, Korea, and Southeast Asia from about 1800 to the present, with special emphasis on East-West relations.

211 Greek and Roman History

3 credits. (Core) Athens in the classical age from Solon to Alexander; Rome during the Republic, the Augustan Age and the early Empire.

212 Medieval History

3 credits. (Core) Western Europe from the decline of the Roman Empire to the fifteenth century with emphasis on the feudal system, the role of the Latin Church, and the rise of universities.

213 Renaissance and Reformation

3 credits. (Core) The waning of the Middle Ages with emphasis on humanism in Italy and the North, the crisis in the Church, and the Protestant Reformation with its conflicts and consequences.

214 Absolute Monarchy

3 credits. (Core) Europe in the seventeenth and eighteenth centuries with emphasis on the ascendancy of France under Louis XIV, the rise of the Dutch Republic, and the Revolution in Stuart England.

215 English History to 1603

3 credits. (Core) From the Anglo-Saxons through the centuries with emphasis on the constitutional and legal foundations, and the unity of Church and Crown up to the age of Elizabeth I.

216 English History since 1603

3 credits. (Core) The evolution of the monarchy and parliament since the Stuarts, and the transition from a rural agrarian society into an industrial democracy, with emphasis on continuity and change.

306 Recent History of the United States

3 credits. (Core) An intensive analysis of the vexing economic, political, social, and diplomatic forces responsible for shaping the American experience since 1900; conflicting interpretations emphasized.

313 History of Tsarist Russia

3 credits. (Core) The development of Russia from its medieval origins to the twentieth century with emphasis on the development of Tsarist institutions, society, and political development.

314 History of Soviet Russia

3 credits. (Core) A study of the Russian Revolution and the building of the new society with emphasis on the Soviet Union's position in the modern world.

317 Revolution, Nationalism, and Democracy

3 credits. (Core) Nineteenth-century Europe from the Vienna Congress to World War I with particular emphasis on the conservative reaction to the French Revolution, the movement towards democracy, and the surge of nationalism.

318 The Age of Anxiety

3 credits. (Core) An examination of twentieth-century Europe, surveying both World Wars and their effect on modern society; emphasis on the rise of totalitarian ideologies, the plight of democracy, and the Depression.

323 History of China

3 credits. (Core) A survey of Chinese history and culture with emphasis on the modern period and the meeting of China and the West.

324 History of Japan

3 credits. (Core) A survey of Japanese history and culture from the beginning to modern times, including Japan's response to the Western impact.

327 History of Africa

3 credits. (Core) A survey of African history and culture using an interdisciplinary approach with emphasis on the history of the politics, cultures, arts, and societies of the African people.

328 Modern Africa

3 credits. (Core) Africa in the nineteenth and twentieth centuries with emphasis on the age of imperialism and colonialism, as well as on African nationalism leading to independence.

330-339 Studies in United States History

3 credits for each course. (Core) An analytical inquiry into special topics and periods: economic history, urban history, colonial America, the American Revolution, the Middle Period, the Age of Industrialism, technology and society, and so forth.

340-349 Minorities in United States History

3 credits for each course. (Core) An incisive view of minorities in a society venerating majoritarian rule: Afro-American history, minorities in America, Southern history, Indian history, women in history, and so forth.

370-379 Special Problems

3 credits. (Core) Special subjects chosen as a response to student and faculty interest.

390 Historical Methods and Historiography

3 credits. (Core) Thorough examination of the development of the historical discipline, and the tools employed by the researcher, concluding with a study of historians themselves.

403 A History of United States Foreign Relations

3 credits. (Core) A study of the major personalities, events, and trends in United States foreign policy with an emphasis on the influence exerted by domestic considerations.

406 Social and Intellectual History of the United States

3 credits. (Core) An examination of the major social and intellectual movements in the United States from colonial times to the present with an emphasis on reform and reformers.

480-489 Independent Study

Variable credit. (Core) Designed to offer an opportunity to use techniques of historical interpretation in specific problem areas. *Prerequisite* approval of the Dean of the Faculty; permission of instructor.

498-499 History Seminar

3 credits. (Core) A special course designed primarily for (but not limited to) senior majors in the Department. Research is an integral part of the learning experience.

GEOGRAPHY**105 World Geography**

3 credits. A regional and topical geography concentrating upon the Old World, including an introduction to political geography, and emphasizing human rather than physical geography.

205 Geography of the United States and Pennsylvania

3 credits. A regional geography of the United States, emphasizing the interrelationships between geography and economics, politics, and culture. Pennsylvania will be examined as one of several case studies.

DEPARTMENT OF MATHEMATICS

Professors Bossler, D. Koontz, Shubert
(Chairman)

Associate Professors Blaisdell, Dolan,
J. Koontz, Morse

Bachelor of Science

The program in mathematics at Elizabethtown College is designed to prepare the mathematics major for graduate study, for secondary teaching, or for employment in industry and government. Service courses provide students in the physical, managerial, social, and life sciences with the mathematical tools essential for their respective fields. These courses also satisfy the General Education Core requirement and teach an awareness of the cultural significance of mathematics and its contribution to the modern world. Instruction is designed to promote the development of proficiency with deductive reasoning, the ability to mathematically model "real" world phenomena, problem solving strategies, and computational skills.

The Department offers four options. The *Pure Mathematics* option is designed to provide a firm foundation for successful graduate study in mathematics. The major objective is to promote the development of self-reliance, initiative, and confidence; i.e., mathematical maturity. The *Secondary Education* option is required for Secondary Education Certification. Students in this option are given a solid foundation in geometry, algebra, and statistics essential for effective teaching and analysis of the secondary school mathematics curriculum. The *Applied Mathematics* option provides a firm foundation in applied mathematics, enabling graduates to pursue careers in industry and government. Students electing this option usually develop additional strength in at least one area which uses mathematics extensively, such as the physical, social, life, or managerial sciences. Finally, a *Computer Science* option is available for the student who desires to be a highly skilled computer analyst with an unusually strong background in mathematics.

All mathematics majors are required to take a minimum of 36 hours in mathematics courses, including Mathematics 121, 122, 201, and 222, and at least two courses selected from 301, 302, 421, 422, and 441. Computer Science 125 is required and should

be taken as early as possible. Each major is also required to take either six hours in a modern language, or six hours of computer science courses in addition to Computer Science 125. Finally, at least one of the four options must be completed as follows:

Pure Mathematics: Mathematics 302, 422, 441, and six hours from other 300 or 400-level mathematics courses.

Secondary Education (Required for Secondary Education Certification): Mathematics 301, 341, 351, 421, either 302 or 422, and six hours from other 300 or 400-level mathematics courses. In addition, Psychology 105; Education 215, 225d, 225e, 305, 472.

Applied Mathematics: Any five courses selected from Mathematics 321, 324, 351, 352, 361, 362.

Computer Science: Mathematics 321, 324, 361, 362, and any other 300 or 400-level mathematics course. In addition, three one-hour computer science mini-courses, Computer Science 312, and nine hours in any 300 or 400-level computer science courses approved by the Chairman of the Department of Mathematics. (These computer science courses will also fulfill the modern language or computer skills requirement.)

011 Intermediate Algebra (Developmental Studies 011)

2 credits. A study of the fundamental algebraic and computational skills used in certain science courses and prerequisite to Mathematics 101 and 117. Graded pass/no pass.

101 Precalculus Mathematics

4 credits. (Core) Precalculus study of the function concept and of particular classes of functions: polynomial, rational, algebraic, exponential, logarithmic, and trigonometric functions. The main objective of this course is to prepare students for Mathematics 121. *Prerequisite Mathematics 011 (competency).*

117 Concepts of Calculus I

4 credits. (Core) Designed to give students in the biological, social, and management sciences a firm working knowledge of calculus. The approach is intuitive with emphasis on applications. Topics include differentiation, curve sketching, exponential functions, and integration. *Prerequisite Mathematics 011 (competency).*

118 Concepts of Calculus II

4 credits. (Core) A continuation of 117. Mathematical abstractions are developed which model problems from the biological, social, and management sciences. Topics include functions of several variables, techniques of integration, differential equations, matrices and linear programming. *Prerequisite Mathematics 117.* Spring semester.

121 Calculus I

4 credits. (Core) A presentation of the basic concepts and techniques of the differential and integral calculus of elementary functions, including a study of limits and continuity. Applications are taken mostly from the physical sciences. *Prerequisite Mathematics 101 (competency).*

122 Calculus II

4 credits. (Core) A continuation of 121, involving the calculus of the trigonometric, exponential, logarithmic, and rational functions. Analytic geometry is also included. *Prerequisite Mathematics 121.*

151 Probability and Statistics

3 credits. (Core) A study of the basic principles of probability, frequency distributions, measures of location and dispersion, sample and population relationships, estimation, and hypothesis testing. The main objective of this course is to introduce students to statistical thinking and tools, and their relation to everyday life.

201 Linear Algebra

3 credits. (Core) A presentation of the basic concepts and techniques of linear algebra, including vectors, vector spaces, matrices, determinants, systems of linear equations, and linear transformations. *Prerequisite Mathematics 121.* Spring semester.

211 Concepts in Modern Mathematics I

3 credits. (Core) An introduction for liberal arts students and prospective elementary teachers to some of the concepts and applications of modern mathematics. Includes such topics as sets and functions, logic, measurement, metric system, introduction to the computer, numeration systems, and number theory.

212 Concepts in Modern Mathematics II

3 credits. (Core) A continuation of 211 for prospective elementary teachers. Topics include the structure of number systems, geometry, geometry of measurement, and an introduction to probability and statistics. *Prerequisite Mathematics 211 or permission of instructor.* Spring semester.

222 Calculus III

4 credits. (Core) A continuation of 122 completing the basic topics of the calculus sequence, including three-dimensional analytic geometry, series, calculus of functions of several variables, and an introduction to differential equations. *Prerequisite Mathematics 122.*

301 Abstract Algebra I

3 credits. (Core) An axiomatic study of a variety of algebraic structures and concepts including divisibility, congruences, modular arithmetic, number theory, sets, groups, and rings. Emphasis on the development of skill in proof construction and interpretation of abstract concepts. *Prerequisite Mathematics 201.* Fall semester.

302 Abstract Algebra II

3 credits. (Core) A continuation of 301. Emphasis will be given to rings, integral domains, fields, polynomials over integral domains and fields, vector spaces, and the development of the system of rational numbers. *Prerequisite Mathematics 301.* Spring semester.

321 Differential Equations

3 credits. (Core) A study of standard methods for solving ordinary differential equations and boundary value problems. Topics include n^{th} order linear differential equations, the Laplace transformation, and power series solutions. *Prerequisite Mathematics 222.* Fall semester.

324 Mathematical Models and Applications

3 credits. (Core) Survey of a number of mathematical topics and a variety of models in the social and life sciences. Problems provide motivation for the development of tools and techniques employed throughout applied mathematics: axiomatics, probability theory, matrix algebra, simulation, and linear programming. *Prerequisite Mathematics 201 and either 222 or 118.* Spring semester.

341 Modern Geometry

3 credits. (Core) The concept of a geometry as a logical system based upon postulates and undefined elements, along with an appreciation of the historical evolution of geometries. Topics include incidence geometries, planes and space, congruence, inequalities, parallel postulates, parallel projections, similarities, circles, and additional theorems. Fall, alternate years.

351 Mathematical Statistics I

3 credits. (Core) A comprehensive development of the theory of statistics through a study of probability and distribution theory, including the uniform, geometric, binomial, hypergeometric, negative binomial, multinomial, Poisson, exponential, gamma, chi-square, Student's t , Snedecor's F , and normal distributions. *Prerequisite Mathematics 222.* Fall semester.

352 Mathematical Statistics II

3 credits. (Core) A continuation of 351. A study of principles of statistical inference with an emphasis on estimation and hypothesis testing. *Prerequisite Mathematics 201, 351.* Spring semester.

361 Numerical Methods in Matrix Algebra

3 credits. (Core) A study of selected topics in matrix algebra useful in advanced mathematical and statistical work involving multivariate analysis. Topics include several computer-oriented techniques applied to the inversion of matrices, determination of eigenvalues and eigenvectors, diagonalization of matrices, and iterative solutions of systems of equations. *Prerequisite Mathematics 201, 222, and Computer Science 125.* Fall semester.

362 Numerical Analysis

3 credits. (Core) A study of iterative methods suitable for computer programming which are useful in solving a variety of mathematical problems arising in engineering and the sciences. Topics include the solution of nonlinear equations, analysis of polynomial interpolation, numerical differentiation and integration, and numerical solutions of differential equations. *Prerequisite Mathematics 201, 222, and Computer Science 125.* Spring semester.

370-379 Special Topics in Mathematics

Variable Credit. (Core) Directed study in topics of special interest to advanced undergraduate mathematics students. *Prerequisite permission of the Department of Mathematics Chairman.*

421 Real Analysis I

3 credits. (Core) A rigorous study of the fundamental concepts of analysis, including such topics as sets and functions, sequences of real numbers, series of real numbers, limits and metric spaces, and continuity. *Prerequisite Mathematics 201, 222.* Fall semester.

422 Real Analysis II

3 credits. (Core) A continuation of 421, including such topics as integration, differentiation, Taylor series, sequences of functions, and series of functions. *Prerequisite Mathematics 421.* Spring semester.

441 Topology

3 credits. (Core) A study of point set topology, using the axiomatic method. Topics include sets, metric spaces, topologies, continuity, separation axioms, compactness, and connectedness. *Prerequisite Mathematics 201, 222.* Fall, alternate years.

480-489 Independent Study

Variable credit. (Core)

Education 305 Practicum in Secondary Education: Mathematics

4 credits. *Prerequisite Education 215; corequisite Education 225e.*

MEDICAL SECRETARIAL SCIENCE

See Department of Business, page 44.

DEPARTMENT OF MODERN LANGUAGES

Associate Professors Daiga, Goodling (*Chairperson*), Van Vliet

Bachelor of Arts

In addition to serving the increasing demand in the professions and industry for men and women who are at home in more than one linguistic and cultural setting, the Department of Modern Languages offers students a unique learning experience. The study of a modern foreign language brings together practical training in language skills (understanding, speaking, reading, and writing) with an understanding of the sociology, history, and literature of the culture from which the language springs and which it expresses. The pragmatic virtues of a useable skill thereby join the humane values of liberal education. The Department of Modern Languages offers programs of study which reflect its desire to encourage both mastery of one or more foreign languages and an overall appreciation of the cultural contexts in which they occur. It directly serves bachelor of arts degree candidates majoring in languages, students preparing for a teaching career in languages, students whose degree programs require studies in languages, and students who, for professional or personal reasons, wish to broaden their cultural background.

The Department of Modern Languages offers instruction in French, German, Spanish, Italian, and Russian, with majors in French, German, and Spanish. A major in the Department may be met by one of the following: 30 credit hours in one language above 201-202, or 18 credit hours of a first language above the 201-202-level plus 12 credit hours of a second language above the 101-102-level; (however, if Russian or Italian is taken as a second language, this 12 hour requirement will include the elementary 101-102 course). A minimum of 15 hours above 201-202 must be taken in residence at Elizabethtown College. Language majors and students who have completed 202 or above are encouraged to participate in the Brethren Colleges Abroad program.

Departmental majors must include the following courses in the major languages: 221, 222, 331, 324. Students planning secondary certification must complete 222 in each language; Psychology 105; Education 225d, 225e, 305, 472.

Upon successful completion of the Modern Language Association Cooperative Foreign Language test, a student may be exempted from the language requirement. This examination is administered free of charge during Freshman Orientation Week and in the spring semester of each year. It may be taken at any other time during the college year for the general college fee of \$20.00. However, this examination may be taken only once in any one language. Any student who wishes to continue beyond 101-102 the study of a language begun at another institution must take this examination to be placed in the appropriate course.

101 Beginning Language (Fr, Ge, Sp, It*, Ru*, Esp*)

3 credits. Presents the elements of structure and seeks to develop the four language skills: hearing, speaking, reading, and writing. Culture-based readings and collateral laboratory assignments. Fall semester.

102 Beginning Language (Fr, Ge, Sp, It*, Ru*, Esp*)

3 credits. A continuation of 101. *Prerequisite 101 or placement by examination.* Spring semester.

201 Intermediate Language (Fr, Ge, Sp, It*, Ru*, Esp*)

3 credits. (Core) Reviews the fundamentals of structure and continues to develop the four language skills: hearing, speaking, reading, writing. Reading materials emphasize cultural and contemporary topics. Partially fulfills the B.A. language requirement. *Prerequisite 102 or its equivalent* ** Fall semester.

202 Intermediate Language (Fr, Ge, Sp, It*, Ru*, Esp*)

3 credits. (Core) A continuation of 201. Completes B.A. language requirement. *Prerequisite 201 or placement by examination.* Spring semester.

221 Conversation and Composition (Fr, Ge, Sp)

3 credits. Provides an opportunity for self-expression, orally and in writing, on situations of everyday life. Review of grammatical structures. Vocabulary development. *Prerequisite 202 or placement by examination.* Fall semester.

222 Conversation and Composition (Fr, Ge, Sp,)

3 credits. Topics of literary and cultural interest provide basis for conversation and composition. Emphasis on writing skills. Study of complex sentence structures. *Prerequisite 221 or permission of instructor.* Spring semester.

All courses numbered above 300 have a prerequisite of 222 or permission of instructor and are offered only upon sufficient student interest and staff. 400-level courses in modern language may fulfill the literature Core requirement.

323 Introduction to Literature (Fr, Ge, Sp)

3 credits. (Core) Develops students' ability to read thoroughly, analyze, and appreciate literature. Selected readings representative of different literary genres.

324 Civilization (Fr, Ge, Sp)

3 credits. Traces significant facts and events of the cultural and historical evolution of France, Germany, or Spain to the twentieth century.

331 Linguistics (Fr, Ge, Sp)

3 credits. Survey of linguistic methods as well as study of phonetics. Training in the improvement of pronunciation.

371-380 Special Problems (ML, Fr, Ge, Sp)

Variable credit. Topics of special interest not otherwise covered in the curriculum. Topics depend upon student interest and faculty availability.

401 Survey of Literature (Fr, Ge, Sp)

3 credits. (Core) Traces the major literary trends and most representative authors in light of significant developments in history.

402 Survey of Literature (Fr, Ge, Sp)

3 credits. (Core) A continuation of the study of major literary trends and representative authors.

481-490 Independent Readings (Fr, Ge, Sp)

Variable credit. (Core) For senior language majors. Independent projects in some area of language or literature. Project may fulfill literature Core requirement, provided topic relates to literature in the foreign language and not to the language itself.

GERMAN

411 German Classicism and Romanticism

3 credits. (Core) A survey of the representative literary works of the greatest period in German literary history.

*Italian, Russian, and Esperanto are offered upon sufficient student interest and faculty availability.

**Equivalency is met by successful completion of at least two years of high school language courses.

412 German Classicism and Romanticism

3 credits. (Core) A continuation of 411.

413 German Drama of the Nineteenth and Twentieth Centuries

3 credits. (Core) Examines closely the German drama, which for two centuries has reflected the vital issues and currents in German history.

414 German Drama of the Nineteenth and Twentieth Centuries

3 credits. (Core) A continuation of 413.

417 German Literature since Goethe

3 credits. (Core) Surveys the social, cultural, and political changes in German history since 1830. Excludes drama.

418 German Literature since Goethe

3 credits. (Core) A continuation of 417.

422 Early German Literature

3 credits. (Core) A survey of German literature from its beginnings to the Baroque.

FRENCH**418 French Literature of the Middle Ages and Renaissance**

3 credits. (Core) A survey of the major works of French literature between the twelfth and sixteenth centuries. Medieval works will be read in modern versions; no prior knowledge of Old French necessary.

421 French Literature of the Age of Louis the XIV

3 credits. (Core) Survey of the Golden Age of French literature, with special attention to Corneille, Racine, Moliere, La Rochefoucauld, La Fontaine, and La Bruyere.

422 French Literature of the Age of Reason

3 credits. (Core) Readings and discussion of the "esprit philosophique" in the Age of the Enlightenment as illustrated in the writings of Fontenelle, Montesquieu, Voltaire, Diderot, Rousseau, and others.

431 French Literature of the Nineteenth Century

3 credits. (Core) Romanticism, Realism, and Symbolism with selections from the works of Chateaubriand, Lamartine, Hugo, Balzac, Flaubert, Stendhal, Baudelaire, Verlaine, Rimbaud, and others.

432 French Literature of the Twentieth Century

3 credits. (Core) The more recent trends in French literature as reflected in the poetry of Valéry, Apollinaire, Cocteau, Prévert, and Michaux; in the plays of Claudel, Giraudoux, Sartre, Ionesco, and Beckett; in the novels of Proust, Gide, Mauriac, Saint-Exupéry, Camus, Robbe-Grillet, and Butor.

SPANISH**413 Spanish American Literature**

3 credits. (Core) Survey of major literature developments and study of most outstanding Spanish American writers from the Conquest to the twentieth century.

414 Spanish American Literature

3 credits. (Core) A continuation of 413.

421 Cervantes

3 credits. (Core) Cervantes—the man, his times, his sources of inspiration, and his works, with emphasis on *Don Quijote*.

422 Golden Age Drama

3 credits. (Core) Introduction to classical Spanish theater. A study of the works of major dramatists from Lope de Vega to Calderon de la Barca.

432 Contemporary Spanish Literature

3 credits. (Core) Analyzes works from the Generation of 1898 to those of the last decade.

Modern Language 387 Psycholinguistics (Psychology 387)

3 credits. Introduction to the nature of language and its relation to human thought and communication. Concerns the child's intuitive acquisition of syntax (generative grammar) as perceived by Noam Chomsky. Topics include aphasia, dialect investigation, and phonology. *Prerequisite* 202 or *permission of instructor*.

Education 305 Practicum in Secondary Education: Foreign Language

4 credits. Principles of modern language teaching. *Prerequisite* Education 215; *corequisite* Education 225c.

DEPARTMENT OF MUSIC

Professor Shull

Associate Professors Douglas, Harrison,
Kitchen, Simmers (*Chairman*), Stites

Assistant Professor Barger

Bachelor of Arts; Bachelor of Science

The music programs are designed to develop student comprehension and appreciation of music as a cultural force in the past and present. Music majors are prepared for professional careers in education, therapy, and studio teaching, as well as graduate study.

The Department offers three programs leading to the degrees of Bachelor of Science in Music Education, Bachelor of Science in Music Therapy, and Bachelor of Arts in Music.

The music education major requires Music 101, 102, 103, 104, 201, 202, 203, 204, 231, 234, 237, 311, 312, 321, 322, 343, 415 or 417, 419, 441, 442, 471, a minimum of 12 hours of applied music instruction, a minimum of eight credit hours in ensemble participation, and Education 215. A minimum grade of C or above in all music courses and in Education 215 is required for certification. Music education majors may elect a choral, instrumental, or general emphasis, the requirements of each emphasis varying slightly from the above. Program approval status has been granted by the Pennsylvania Department of Education and the National Association of Schools of Music.

The music therapy major requires Music 101, 102, 103, 104, 192, 201, 202, 203, 204, 231, 234, 237, 293, 311, 321, 343, 393, 394, 415 or 417, 419, 441, 442, 473, 474, 475, 479, 491, 494, a minimum of 8 semester hours in applied music instruction, and a minimum of six hours credit in ensemble. A grade of C or above in all music and music therapy courses is required. A six-month internship in an approved clinical facility is required for graduation after completion of the four-year program. The music therapy program has been fully accredited by the National Association for Music Therapy and the National Association of Schools of Music.

The Bachelor of Arts in Music normally requires Music 101, 102, 103, 104, 201, 202, 203, 204, 321, 322, 415 or 417, 419, 441, 442, 12 semester hours credit in applied music and three hours of ensemble credit. The music requirements of the bachelor of arts degree are flexible and are determined by the needs and interests of each student. Under the guidance of a departmental adviser, each B.A. music major works out a program which includes at least 40 hours of music courses.

A copy of other departmental graduation requirements for music majors, including proficiency requirements in piano and voice, and recital participation and attendance, may be obtained from the Department Chairman's office.

The Music Department has a Preparatory Division which offers instruction to pre-college students, adults, and college students who desire to take instruction without credit. Instruction is available from qualified college student instructors and departmental faculty. Interested persons should contact the Director of the Preparatory Division.

101 Literature and Materials of Music

3 credits. (Core) Fundamentals of music theory, harmony, and form with emphasis on analytical and compositional skills. Includes introduction to music literature. *Corequisite Music 103*. Fall semester.

102 Literature and Materials of Music

3 credits. (Core) A continuation of 101. *Prerequisite Music 101 or permission of instructor; corequisite Music 104*. Spring semester.

103 Fundamentals of Sight-Singing, Ear-Training, and Keyboard Harmony

1 credit. Development of visual, aural, and basic keyboard skills related to the theoretical and analytical materials covered in 101. *Corequisite Music 101*. Fall semester.

104 Sight-Singing, Ear-Training, and Keyboard Harmony

1 credit. A continuation of 103. *Prerequisite Music 103 or permission of instructor; corequisite Music 102*. Spring semester.

105 Introduction to Music Literature

3 credits. (Core) Introduction to the music of the Western world, major composers, and selected famous compositions, with emphasis on listening to music from the Baroque era to the present.

111 Voice Class

1 credit. (Core) Study of the fundamentals of breath control, tone production, and development of vocal technique. Open to all students.

113 Piano Class

1 credit. Designed to develop basic piano skills and knowledge of music fundamentals. Daily practice required. Not open to music majors. Credit for 113 given only upon completion of 114. Fall semester.

114 Piano Class

1 credit. A continuation of 113. *Prerequisite Music 113.* Spring semester

117 Piano Class

1 credit. Basic piano skills. Open to all music majors; required of those whose first applied instrument is not piano. *Prerequisite permission of instructor for non-majors.*

118 Piano Class

1 credit. A continuation of 117. *Prerequisite Music 117.*

119 Guitar Class

1 credit. An introductory course emphasizing studies in strumming, finger style, and note reading.

120 Guitar Class

1 credit. (Core) A thorough approach to classical guitar technique and classical literature.

192 Introduction to Music Therapy

1 credit. A survey of music therapy through lecture-demonstration sessions, reading, student reports, and field trips. Emphasis on the potentials of music therapy with a variety of populations. *Prerequisite music major or permission of instructor.* Spring semester.

201 Advanced Literature and Materials of Music

3 credits. Advanced harmony including seventh chords, form, and analysis. *Prerequisite Music 102 or permission of instructor; corequisite Music 203.* Fall semester.

202 Advanced Literature and Materials of Music

3 credits. A continuation of 201 with emphasis on altered chords. Introduction to arranging, from small ensembles to the modern orchestra. *Prerequisite Music 201 or permission of instructor; corequisite Music 204.*

203 Advanced Sight-Singing, Ear-Training and Keyboard Harmony

1 credit. Continued emphasis on reading and dictation skills. *Corequisite Music 201.*

204 Advanced Sight-Singing, Ear-Training and Keyboard Harmony

1 credit. A continuation of 203. *Prerequisite Music 203 or permission of instructor; corequisite Music 202.*

231 Brass Class

1 credit. Methods of tone production, fingerings or positions, care and repair, and methods and materials for teaching trumpet or cornet, French horn, baritone, trombone, and tuba. Fall semester.

234 Percussion Class

1 credit. Methods of tone production, care and repair, and methods and materials for teaching snare drum, cymbals, timpani, and other percussion instruments. Spring semester.

235 History of Jazz

3 credits. (Core) Exploration of the chronological development of jazz as an American art form, from Blues and Ragtime to Third Stream and current styles. Offered on demand.

237 Elementary String Class

1 credit. Method of tone production, fingerings, care and repair, and methods and materials for teaching violin, viola, violoncello, and double bass. Fall semester.

238 Intermediate String Class

1 credit. A continuation of 237. *Prerequisite Music 237.* Spring semester.

293 Recreational Music

1 credit. The use of recreational instruments, materials and techniques with handicapped persons. *Corequisite Music 311.* Fall semester.

311 Music in the Elementary School

3 credits. Thorough study of objectives, methods, and materials for elementary school music programs through singing, instrumental, rhythmic, creative, and listening activities. Detailed study and use of recent school music songbook series. Observations and laboratory experience included. *Prerequisite music majors or permission of instructor.* Fall semester.

312 Music in the Secondary School

3 credits. Methods and materials for secondary general music classes and performance groups, with special concentration on the junior high school general music class, adolescent voice problems, and the successful organization and direction of choral and instrumental performing groups. Observations and laboratory experience included. Spring semester.

321 Instrumental-Choral Conducting and Techniques

3 credits. Instruction in directing choruses, bands, and orchestras. Topics include conducting techniques, choral and instrumental methods and problems, score reading, and interpretation. *Prerequisite Music 202 or permission of instructor.*

322 Instrumental-Choral Conducting and Techniques

3 credits. A continuation of 321. *Prerequisite Music 321.* Spring semester.

325 Teaching Music in the Elementary School-Lab

1 credit. Music skills for elementary education majors. Fundamentals of music theory, chording skills on piano, guitar, and autoharp, and music reading skills. May be exempted by proficiency exams.

326 Teaching Music in the Elementary School

3 credits. Study of teaching methods and materials for use in a balanced elementary music program that includes rhythmic activities, singing, playing melody-harmony instruments, and listening activities. Topics include the use of music in developing learning centers, ways of promoting individual creativity, and methods of integrating music with other aspects of childhood education. *Prerequisite Music 325.*

327 Advanced String Class

1 credit. A continuation of 238. *Prerequisite Music 238.* Fall semester.

343 Woodwind Class

1 credit. Methods of tone production, fingerings, care and repair, and methods and materials for teaching flute, oboe, clarinet, bassoon, and saxophone. Fall semester.

344 Woodwind Class

1 credit. A continuation of 343. *Prerequisite Music 343.* Spring semester.

371-380 Special Problems

Variable credit. This sequence of courses permits the Department to offer courses to any group of students who express an interest in a particular area of study not a regular part of the curriculum.

393 Psychological Foundations of Music

2 credits. Study of acoustics and the psychology of music as they relate to life and the music professions. An examination of the events and circumstances that occur in music, and influence it. May be taken out of sequence or as an individual course by non-therapy majors. *Prerequisite music major or permission of instructor.* Fall semester.

394 Psychological Foundations of Music II

2 credits. Study of 4 basic research models and an appropriate research prose style. Emphasis on the potential application of experimental and quantitative research techniques to the study of music's effects on behavior. May be taken out of sequence, or as an individual course by non-therapy majors. *Prerequisite music major or permission of instructor.* Spring semester.

415 Classical-Romantic Music Literature

2 credits. (Core) Survey of instrumental and vocal music of the Classical and Romantic periods. *Prerequisite Music 202, or 105, or permission of instructor.* Fall semester.

417 Impressionistic-Modern Music Literature

2 credits. (Core) Survey of music from Impressionism to the present avant-garde styles. *Prerequisite or corequisite Music 202; prerequisite for non-music majors Music 105 or permission of instructor.* Spring semester.

419 Counterpoint

2 credits. A study of contrapuntal techniques of the sixteenth through twentieth centuries through representative composers and original compositions. *Prerequisite or corequisite Music 202.* Spring semester.

440 Instrumental Arranging

2 credits. Arranging music for concert or marching bands and orchestras. Study of the ranges, limitations, and uses of instruments and their effects in various combinations. *Prerequisite Music 202 or permission of instructor.* Offered on demand.

441 History of Music to 1750

3 credits. Survey course with emphasis on the development of musical forms, styles, and media through considering music literature in its cultural environment. *Prerequisite Music 202 or permission of instructor.* Fall semester.

442 History of Music Since 1750

3 credits. Survey course with emphasis on the development of musical forms, styles, and media through considering music literature in its cultural environment. *Prerequisite Music 202 or permission of instructor.* Spring semester.

451 Piano Methods and Materials

2 credits. Modern methods in teaching piano to children, youth, and adults. Course includes a survey of teaching materials for various stages of progress, teaching demonstrations, and experience. Credit for 451 will be given only upon completion of 452. *Prerequisite two semesters of Music 269.* Alternate years.

452 Piano Methods and Materials

2 credits. A continuation of 451. *Prerequisite* Music 451.

471 Student Teaching in Music

8, 10, or 12 credits. Teaching experience and observation in elementary and secondary music classes. Instrumental and vocal emphases vary with student strengths and needs. *Prerequisite* permission of Department.

473 Clinical Experience I: Music Therapy

1 credit. Supervised field experience (observation and participation) in an approved clinical facility. Minimum of 30 clock hours total for each clinical experience. Music therapy majors only. *Prerequisite* Music 192.

474 Clinical Experience II: Music Therapy

1 credit. Supervised field experience (observation and participation) in an approved clinical facility. Minimum of 30 clock hours total for each clinical experience. Music therapy majors only. *Prerequisite* Music 473.

475 Clinical Experience III: Music Therapy

1 credit. Supervised field experience (observation and participation) in an approved clinical facility. Minimum of 30 clock hours total for each clinical experience. Music therapy majors only. *Prerequisite* Music 474.

479 Professional Internship in Music Therapy

No credit. Six months of supervised practical experience with a registered music therapist in an NAMT approved facility. Taken only after completion of all other music therapy degree requirements. *Prerequisite* permission of instructor.

481-490 Independent Study

Variable credit. The purpose of this class is to offer individual students opportunities for musical composition, arranging, or research under faculty supervision. *Prerequisite* permission of instructor.

491 Influence of Music on Behavior

3 credits. Survey of experimental studies dealing with the effects of music on behavior, the intervention of music in therapy, and basic therapeutic approaches and techniques. *Prerequisite* Music 473, 393; or permission of instructor.

494 Music in Therapy

3 credits. Therapeutic approaches and techniques in music therapy. *Prerequisite* Music 491, or permission of instructor.

APPLIED MUSIC AND ENSEMBLES

Students in applied music advance as rapidly as their abilities permit. In this process they must study technical exercises and literature from various musical periods and styles. Students may register with or without credit for the established music ensembles and for other ensembles organized under faculty supervision; they may repeat the ensembles for credit which they may apply to the fine arts Core requirement. However, to receive credit, students must meet the standards for attendance at rehearsals and public performances established by the faculty director.

268 Voice

1 credit. (Core)

269 Piano

1 credit. (Core) Students with no piano background or limited background will be enrolled in piano class for one or more semesters before enrolling for private piano lessons. Music majors will register for Music 117; non-music majors will register for Music 113.

270 Organ

1 credit. (Core)

272 Viola

1 credit. (Core)

274 String Bass

1 credit. (Core)

276 Flute

1 credit. (Core)

278 Oboe

1 credit. (Core)

280 Saxophone

1 credit. (Core)

282 French Horn

1 credit. (Core)

284 Baritone

1 credit. (Core)

286 Percussion

1 credit. (Core)

271 Violin

1 credit. (Core)

273 Cello

1 credit. (Core)

275 Guitar

1 credit. (Core)

277 Clarinet

1 credit. (Core)

279 Bassoon

1 credit. (Core)

281 Trumpet / Cornet

1 credit. (Core)

283 Trombone

1 credit. (Core)

285 Tuba

1 credit. (Core)

360 Chamber Music

½ credit. (Core) General chamber music course from which groups such as Brass Ensemble, String Ensemble, Woodwind Ensemble, Chamber Singers, and Piano Ensemble will be formed as need arises. An opportunity to participate in a variety of mixed chamber music ensembles.

361 Concert Choir

1 credit. (Core) Open to any student; acceptance based upon auditions by appointment. In addition to giving several performances prior to Christmas and participating in the annual Spring Concert, this group sings approximately 20 concerts in churches and schools in Pennsylvania and neighboring states each spring.

362 Choral Union

½ credit. (Core) Mixed vocal ensemble open to any member of the student body (without prior audition) if there are enough members per section to balance the ensemble.

365 Orchestra

1 credit. (Core) Performs three major concerts during the academic year which constitute an invaluable part of musical training in literature and technique of performance. *Prerequisite (for winds and percussion) permission of instructor.*

368 Jazz Band

½ credit. (Core) The Elizabethtown College Jazz Band serves as an integral part of the college curriculum. It functions as a laboratory and as a touring band, playing the best in swing and jazz with the big band sound. Its program of music includes swing, pop tunes, ballads, and jazz, including old standards and current progressive jazz.

369 Concert Band

1 credit. (Core) Open to any qualified student; acceptance subject to approval by director. Performances include the annual winter and spring concerts, and a number of off-campus appearances.

DEPARTMENT OF OCCUPATIONAL THERAPY

Assistant Professor Gordon (*Chairperson*)
Instructors Abildness, Hiler, Sebelist

Bachelor of Science

Professional Accreditation: The Department of Occupational Therapy formally received accreditation in 1976 by the American Occupational Therapy Association and the American Medical Association.

The individual who is educated in occupational therapy has developed the ability to find new solutions to health care problems by adapting and using knowledge which is rooted in both the liberal arts and professional traditions. The student in occupational therapy engages in a program that integrates the humanities, and the behavioral and physical sciences with professional study, thereby reflecting the liberal arts and community service traditions of Elizabethtown College. This distinctive combination of courses enriches the student's background, and produces therapists who are sensitive, creative, and curious about new ideas.

This emphasis on the importance of both the humanities and the sciences in preparing for professional life is further manifest in the two philosophical approaches which shape the Department's program. On the one hand, the Department stresses the importance of a precise knowledge about human development—the biophysical and psychological processes which operate in every individual. On the other hand, the Department stresses that cultural anthropology—an awareness of the significance of man's broader social patterns and cultural environments—is equally necessary if one is to understand individuals and successfully deal with their cultural and developmental impairments.

Occupational therapy majors must take Occupational Therapy 113, 114, 211, 213, 214, 215, 216, 217, 225, 302, 307, 311, 317, 318, 370, 411, 412, 413, 415, 416, 417, 418; Chemistry 101, 104; Biology 111, 201, 202 and 502; Psychology 105, 225, 226; Anthropology 102 or 311; and Sociology 340. Mathematics 151 and either Psychology 232 or 322 are strongly recommended.

ACADEMIC AND FIELD WORK EDUCATION

The occupational therapy program comprises a four-year course of classroom study and at least six months of field work education. The student may elect one of three options:

First Option: The student may complete three years of academic work followed by three months of level-II field work experience during the summer between the junior and senior years. The student will then complete the senior academic year followed by three months of level-II field work the next summer.

Second Option: The student may complete four years of academic work followed by six months of level-II field work experience.

Third Option: The student may complete the entire program in four years by taking two especially designated senior-level courses in the spring semester of the junior year. The student will complete three months of level-II field work in the summer following the junior year and will finish the remaining classroom studies during the fall semester of the senior year. The student will then complete three months of level-II field work experience during the spring semester of the senior year.

ADDITIONAL FIELD WORK EDUCATION

After completing the required six months of level-II field work, the student may elect to complete two additional months of level-II field work experience and may pursue this study in any of the following areas: child psychiatry, mental retardation, neurophysiology, hand rehabilitation, advanced psych-social and physical rehabilitation, research, administration, and education.

NATIONAL CERTIFICATION EXAMINATION

Upon being awarded the degree in occupational therapy, the student is eligible to sit for the national certification examination, held twice a year on the last Saturdays in June and January.

ADMISSION REQUIREMENTS FOR DEPARTMENT

1. Prior to admission into the Department

- The student will submit an application to the Director of Admissions before December 1 of the year prior to the anticipated date of matriculation. Students are admitted into the program in the fall semester only.
- The student will have an interview with a member of the Occupational Therapy Department in order to determine eligibility.
- The occupational therapy faculty will select the students for the next academic year and submit their names to the Director of Admissions.

2. Evaluation after admission into the Department

- Admission into the Department of Occupational Therapy does not imply that a student will be guaranteed completion of the entire course of study nor that he will be eligible to sit for the certification examination. The student will be reviewed by a faculty evaluation committee at the conclusion of each academic year. If the committee believes that a student is not suitable academically or professionally for the area of

study, the student will be counseled into other areas of endeavor. In order to remain in the Department the student must maintain the following standards:

- (1) The student must have at least a 2.5 average in all courses required for the major (both occupational therapy and related requirements).
- (2) The student must satisfactorily meet the standards and requirements in all phases of field work education (including level-I field work, laboratory, and level-II field work experience).

The curriculum in occupational therapy may be subject to revision during the period 1979-81.

113 Basic Concepts in Occupational Therapy

3 credits. An introduction to the theoretical basis for the practice of occupational therapy. The historical importance of purposeful and creative activity suitable for the human being; the cultural and developmental use of activity to foster normal development and to treat emotional and physical dysfunction. Related field trips. Fall semester.

114 Basic Concepts in Occupational Therapy

3 credits. A continuation of 113 emphasizing the treatment concepts, theories, and skills which constitute the wide areas in which occupational therapy finds its present and potential contributions to health care. Spring semester.

211 Introduction to Basic Material Culture: Developmental Laboratory

1 credit. A series of discussion and laboratory sessions designed to help the student understand how activities (from 0-12 years) related to human development and cultural anthropology apply directly to the concepts behind occupational therapy. Fall semester.

213 Introduction to Basic Material Culture: Textiles

1 credit. Instruction in textiles, including practice in creative problem solving as it relates to occupational therapy. Fall semester.

214 Introduction to Basic Material Culture: MultiMedia / Graphics

1 credit. Instruction in graphics and minor skills with emphasis on their therapeutic application to occupational therapy. Spring semester.

215 Introduction to Basic Material Culture: Pottery

1 credit. Instruction in the basic and major skills of pottery with emphasis on the therapeutic value. Fall semester.

216 Introduction to Basic Material Culture: Wood

1 credit. Instruction in the theory and practice of wood, basic hand tools, and power equipment as treatment media. Spring semester.

217 Kinesiology

3 credits. The principles of functional anatomy, with emphasis on normal and abnormal human motion, and how it is affected by cultural, mechanical, psychological, and physiological factors. *Prerequisite Biology 201, permission of instructor.* Spring semester.

225 Human Development Laboratory

2 credits. Refer to Psychology 225 for lecture description. The laboratory concentrates on reflexive motor behavior with emphasis on the cognitive, emotional, sociocultural areas from early developmental years. *Corequisite Psychology 225.* Fall semester.

302 Perspectives in Pediatrics

3 credits. An overview of pediatric conditions as they relate to the child and family, with emphasis on occupational therapy theories and methods (activity analysis, evaluation, and treatment), and the therapeutic relationship with the child from birth to puberty. *Prerequisite permission of instructor.* Spring semester.

307 Neuro-Behavioral Science I: Neurology

3 credits. A review of basic neuro-anatomy and neurophysiology with emphasis on the functional neuronal systems (motor, sensory, limbic), clinical conditions, and therapeutic treatment. *Prerequisite Biology 201, 202 and 502, 318.* Fall semester.

311 Neurobehavioral Science II: Anthropological Perspectives in Psychiatry

3 credits. The course uses the anthropological perspective to examine psychiatry within its cultural context. Primary focus on North American culture with some cross-cultural comparisons. Fall semester.

317 Psych-Social Rehabilitation

4 credits. An examination of major psychiatric concepts relevant to occupational therapy, with emphasis on theory application, utilizing evaluation tools, goal planning, activity analysis, treatment methods, group techniques, and level-I field work experience. *Prerequisite permission of instructor.* Fall Semester.

318 Physical Rehabilitation

5 credits. The use of neurodevelopmental, biomechanical, and rehabilitative evaluations and treatment intervention strategies to enhance the quality of life for individuals with major physical disabili-

ties. Medical lectures, laboratory, and level-I field work experience. *Prerequisite permission of instructor.* Spring semester.

370 Special Topics

1 credit. Using concepts from physical and psych-social rehabilitation courses, the laboratory integrates theory and practice. Major focus on independent problem solving and practice of those skills necessary for level-II field work. *Prerequisite or corequisite Occupational Therapy 317, 318.*

411 Advanced Concepts with Material Culture

3 credits. The development of skills in the organization and administration of an occupational therapy department; the structure of the professional association and its relationship to national health care systems. Fall semester.

412 Senior Practicum

3 credits. The course offers graduating seniors the opportunity to conduct scholarly research within an area of their major. Fall and spring, dependent upon student's date of graduation.

413 Sensory Integration

4 credits. Comprehensive study of the sensory integration of the central nervous system, emphasizing standardized evaluation procedures, sensory integrative disorders, remediation techniques within a developmental framework. Lecture, laboratory, and level-I field work. *Prerequisite permission of instructor.* Fall semester.

415 Advanced Concepts in O.T. and Health Care I: Behavior Biofeedback Treatment Application

1 credit. Instruction in learning and teaching to others the use of biofeedback apparatus, procedures, and theory as an adjunctive clinical tool with emphasis on behavioral treatment and problem-solving techniques. Fall semester.

416 Advanced Concepts in O.T. and Health Care II: Health Care Systems

1 credit. A study of the various components of local and national health care service systems, with some discussion of health care in foreign cultures. Spring semester.

417 Advanced Concepts in O.T. and Health Care III: Spanish for the Health Professional

1 credit. Intensive instruction in the development of fundamental skills in Spanish conversation pertinent to the health care professional. Fall semester.

418 Advanced Concepts in O.T. and Health Care IV: Movement Awareness, An Interpersonal Communication Code

1 credit. Personal and professional therapeutic techniques used to identify, through body movement and expression, one's physiological, emotional, and creative characteristics. Techniques include isolation, flexibility, relaxation, and body conditioning exercises. Spring semester.

PHILOSOPHY

See Department of Religion and Philosophy, page 84.

DEPARTMENT OF PHYSICAL EDUCATION AND HEALTH

Professor Wright
Associate Professor Ober (*Chairman*)
Assistant Professors Garrett, Kauffman, Smith,
Tulley, Whitmore

The Department of Physical Education and Health affords an opportunity for all students to develop an interest in play and recreation which will be fun and worthwhile to them during college and later life. We strive to develop social and moral standards such as sportsmanship, teamwork, tolerance, and other character benefits which come from properly conducted play.

All students at Elizabethtown College are required to take four semester hours of physical education courses of which two may be taken in aquatics. Students must take at least one semester of an aquatics activity or successfully complete a proficiency test in swimming. The remaining physical education requirements may be satisfied by electing any of the courses offered except Physical Education 270, 275, and 285. No more than six semester hours of physical education may count towards the 128 hours required for graduation from the College.

105 Beginning Swimming (women)

1 credit. (Core) Elementary-level instruction in the basic strokes for non-swimmers.

115 Intermediate Swimming (women)

1 credit. (Core) Instruction in the techniques of the basic strokes; survival swimming and water safety.

125 Beginning Swimming (men)

1 credit. (Core) Elementary-level instruction in the basic strokes for non-swimmers.

135 Intermediate Swimming (men)

1 credit. (Core) Instruction in the techniques of the basic strokes; survival swimming and water safety.

145 Field Hockey-Volleyball (women)

1 credit. (Core) Rules, playing techniques, and skill development.

150 Adapted Physical Education

1 credit. (Core) Individual activity or corrective exercises adapted to the needs and abilities of the student. Graded pass/no pass. *Prerequisite recommendation of a physician.*

155 Tennis-Bowling (coed)

1 credit. (Core) Rules, playing techniques, and skill development.

160 Adapted Physical Education

1 credit. (Core) Individual activity or corrective exercises adapted to the needs and abilities of the student. Graded pass/no pass. *Prerequisite recommendation of a physician.*

165 Golf-Badminton (coed)

1 credit. (Core) Rules, playing techniques, and skill development.

185 Basketball (women)

1 credit. (Core) Rules, playing techniques, and skill development.

195 Basketball-Soccer (men)

1 credit. (Core) Rules, playing techniques, and skill development. Fall semester.

205 Archery-Badminton (coed)

1 credit. (Core) Rules, playing techniques, and skill development.

210 Basketball (men)

1 credit. (Core) Rules, playing techniques, and skill development. Spring semester.

215 Sports Appreciation (coed)

1 credit. (Core) A study of the important role which sports play in our society.

217 Senior Life Saving

1 credit. (Core) Instruction and practice in life saving, water safety, and pool management. Meets Red Cross certification requirements. Graded pass/no pass.

218 Water Safety Instruction (coed)

1 credit. (Core) Advanced life saving skills, swimming instruction, and use of pool equipment. Meets Red Cross Instructor certification requirement. Graded pass/no pass. *Prerequisite current Senior Life Saving Certificate.*

225 Tennis (women)

1 credit. (Core) Rules, playing techniques, and skill development. Fall semester.

235 Tennis (men)

1 credit. (Core) Rules, playing techniques, and skill development. Fall semester.

240 Bowling

1 credit. (Core) Rules, playing techniques, and skill development.

245 Racquetball (women)

1 credit. (Core) Rules, playing techniques, and skill development.

250 Volleyball (coed)

1 credit. (Core) Rules, playing techniques, and skill development.

255 Handball-Racquetball (men)

1 credit. (Core) Rules, playing techniques, and skill development.

260 Adapted Physical Education

1 credit. (Core) Individual activity or corrective exercises adapted to the needs and abilities of the student. Graded pass/no pass. *Prerequisite recommendation of a physician.*

265 Physical Conditioning (coed)

1 credit. (Core) Techniques of exercise, jogging, weight-training, and body development.

270 Advanced Individual Sports

3 credits. Methods, techniques, and teaching skills in selected sports. Summer session only.

275 Contemporary Health Problems

3 credits. A study of contemporary physical, mental, and social aspects of personal and community health problems. Educational principles applied to teaching in the elementary school.

285 Physical Education for the Elementary School Child

3 credits. A study of the physical growth of children from ages 4–12, with consideration of games and activities appropriate to the physical development of the child in the elementary grades.

290 Interpretive Dance Theory (coed)

1 credit. (Core) The development of an awareness of the body as an instrument which can communicate ideas, thoughts, and emotions through dance. Priority given to music therapy majors. Fall semester.

295 Introduction to Body Movement and Dance Form (coed)

1 credit. (Core) Disciplines of ballet and muscular control.

370–380 Special Topics in Physical Education (coed)

1 credit. (Core) These courses may include such physical activity courses as horsemanship, bicycling, self-defense techniques, skiing, and so forth, for which there will likely be an extra charge. Graded pass/no pass.

481–490 Self-Directed Physical Education Activity

1 credit. (Core) Designed for the student who attends Evening Division or studies abroad, or who has extenuating circumstances which prohibit him from meeting regularly scheduled physical education classes. Graded pass/no pass.

DEPARTMENT OF PHYSICS AND EARTH SCIENCE

Associate Professors Hope
Custer, (*Chairman*), Thompson
Assistant Professor Evinger

Bachelor of Arts; Bachelor of Science

Programs in the Department of Physics and Earth Science are designed to convey an appreciation and understanding of physical and natural systems and to prepare students for professional careers in contemporary society. In accord with the philosophy that both majors and non-majors should be broadly exposed to studies of natural phenomena, the Department offers a wide variety of formal courses and informal learning experiences, many of which are intended to develop students' abilities for continuing self-education. Analysis, problem solving, and hands-on experience are emphasized at all instructional levels.

Students majoring in department programs commonly go on to careers in physics, engineering, geoscience, computer technology, management, and teaching, or to graduate school.

The Department offers three programs: 1) a Bachelor of Science in Physics, 2) a cooperative program in engineering at the completion of which the student is awarded a bachelor of science degree from The Pennsylvania State University and a bachelor of arts degree from Elizabethtown College, and 3) a secondary general science concentration.

Physics majors are required to take Physics 132, 231, 232, 343, 404; Chemistry 101, 104; Mathematics 121, 122, and 222. Those planning on graduate study or work in industry must also take Physics 305, 306, 344, 345, 403, 407, 408, 490; and six credits of electives from Mathematics 201, 321, 322, 351, or 362. Those planning to certify to teach physics at the secondary level must take Biology 105; and 106 or 108; Computer Science 105; Education 215, 225d, 225e, 305, 472; and six credits of electives from the offerings of the Department of Physics and Earth Science.

Majors in engineering will complete three years at Elizabethtown College and two years at The Pennsylvania State University. To be eligible for admission at The Pennsylvania State University, a student must have a 2.3 cumulative average at Elizabethtown College and be recommended by Elizabethtown College. Students who have studied at The Pennsylvania State University prior to matriculation at Elizabethtown College must have a quality point average of at least 2.5 for all college work taken. At Elizabethtown College the student will complete Phy-

sics 132, 231, 232, 305, 306, Drawing 115, 116; Mathematics 121, 122, 222; Chemistry 101, 104; and other courses required for the specific field of engineering chosen: petroleum and natural gas, agricultural, chemical, civil, electrical, environmental, industrial, mechanical, mining, and nuclear engineering; ceramic science, engineering science, and metallurgy.

Students in the general science certification program can choose a concentration in physics. Those interested in the program should consult the detailed description in the interdisciplinary section of this catalog, page 89.

111 Introduction to Physics

4 credits. (Core) Introduction to the concepts of physics through a study of the laws of motion, energy, electricity, light, relativity, radioactivity, and other topics of interest. Hours: lecture 3, laboratory 2. Fall semester.

203 General Physics I

4 credits. (Core) First semester of a comprehensive study of the principles of physics with applications and instrumentation. Topics include mechanics, waves, sound, light, optics, and electricity. Hours: lecture 3, laboratory 2. *Prerequisite Mathematics 101.* Fall semester.

204 General Physics II

4 credits. (Core) Continuation of 203. Topics include heat, radioactivity, and magnetism. Hours: lecture 3, laboratory 2. *Prerequisite Physics 203.* Spring semester.

132 College Physics I

4 credits. (Core) First of a three-semester series which investigates basic principles of physics using differential and integral calculus. Topics include mechanics, oscillations, and fluid mechanics. Hours: lecture 3, laboratory 2. *Corequisite Mathematics 121.* Spring semester.

231 College Physics II

4 credits. (Core) Second of a three-semester series which investigates basic principles of physics using differential and integral calculus. Topics include gravitation, electricity and magnetism, and sound. Hours: Lecture 3, laboratory 2. *Prerequisite Physics 132; corequisite Mathematics 122.* Fall semester.

232 College Physics III

4 credits. (Core) Third of a three-semester series which investigates basic principles of physics using differential and integral calculus. Topics include thermodynamics, special relativity, atomic physics, nuclear physics, and elementary particles. Hours: lecture 3, laboratory 2. *Prerequisite Physics 231; corequisite Mathematics 122.* Spring semester.

305 Introduction to Theoretical Mechanics I

3 credits. (Core) Introduction to vector analysis, conditions of equilibrium, coordinate systems, cables, virtual work, and oscillating systems; emphasis on problem solving. *Prerequisite Physics 232, Mathematics 222.* Fall semester.

306 Introduction to Theoretical Mechanics II

3 credits. (Core) Study of motion of systems of particles, motion of rigid bodies, particles in a central force field, accelerated coordinate systems, and the application of Lagrange's Equations; emphasis on problem solving. *Prerequisite Physics 305.* Spring semester.

333 Computer Systems Interfacing (Chemistry 333, Physics 333)

3 credits. Digital logic and integrated circuits to implement logic; architecture and machine language programming of minicomputers and microprocessors; design, testing, and construction of instrument-to-computer and computer-to-computer interfaces; design and testing of supporting software. Spring semester.

343 Introduction to Quantum Theory (Chemistry 343)

3 credits. (Core) Introduction to the principles of quantum theory, radiation, atomic spectra, and the extranuclear structure of the atom. *Prerequisite Physics 232, Mathematics 222.* Fall semester.

344 Modern Physics

3 credits. (Core) Introduction to nuclear and atomic processes. Topics include radioactivity, the nuclear force, nuclear interactions, quantum statistics, solid state applications, and elementary particles. *Prerequisite Physics 343.* Spring semester.

345 Advanced Physics Laboratory

2 credits. (Core) Advanced laboratory with experiments in modern physics, electricity and magnetism, optics, and thermodynamics; employs a variety of experimental techniques. *Prerequisite Physics 343.* Spring semester.

370-379 Special Topics in Physics

Variable credit. (Core) Study of an advanced topic, experimental or theoretical, of special interest to the student. *Prerequisite permission of instructor.*

403 Kinetic Theory and Thermodynamics

3 credits. (Core) Study of the kinetic theory of matter, statistical mechanics, and the principles of thermodynamics, including temperature, heat, work, internal energy, entropy, and enthalpy. *Prerequisite Physics 232, Mathematics 222.* Fall, alternate years.

404 Electronics

4 credits. (Core) Practical and theoretical study of

fundamental components and circuits, including transistors, diodes, integrated circuits, electron beams, filters, amplifiers, control circuits, and some digital electronics. Hours: lecture 3, laboratory 3. Fall, alternate years.

407 Electricity and Magnetism I

3 credits. (Core) First of a two-semester sequence dealing with static and time dependent, electric and magnetic fields, electronic components, measurements, and properties of matter. Topics include vector calculus solutions of field equations, boundary conditions, network theory, electrical properties of matter, and basic properties of static magnetic fields. *Prerequisite Physics 232.* Fall, alternate years.

408 Electricity and Magnetism II

3 credits. (Core) Continuation of 407. Topics include magnetic properties of matter, time dependent fields, Maxwell's equations, radiation, and special relativity. *Prerequisite Physics 407.* Spring, alternate years.

490 Seminar

2 credits. (Core) Directed experimental or theoretical study requiring faculty acceptance of proposal and a final formal report of work. *Prerequisite permission of instructor.*

481-489 Independent Study

Variable credit. (Core) Study and experimentation in an area of interest to the student and faculty member. *Prerequisite permission of instructor.*

DRAWING**115 Graphics and Descriptive Geometry**

2 credits. Study of engineering-related drawing, including projection systems, lettering, sketching, pictorial drawing. Descriptive drawing will include three-dimensional problems whose solution requires change in position and rotation. Students must provide themselves with suitable drawing equipment. Hours: lecture 1, laboratory 5, Fall semester.

116 Graphics and Descriptive Geometry

2 credits. A continuation of 115. Topics include intersection of objects, vectors, and graphs. The student will elect and solve an original design problem approved by the instructor. Hours: lecture 1, laboratory 5. *Prerequisite Drawing 115.* Spring semester.

Education 305 Practicum in Secondary Education: Science

4 credits. Teaching science in secondary schools. *Prerequisite Education 215; corequisite Education 225e.*

EARTH SCIENCE

105 Field Earth Science

8 credits. (Core) Intensive introductory program of field and laboratory studies emphasizing in situ instruction. Includes geologic and topographic mapping, and investigations of the earth and atmosphere. *Prerequisite permission of instructor.* Summer sessions.

107 Astronomy

4 credits. (Core) General principles of solar system and stellar astronomy; laboratories provide practical experience in determining astrometric quantities. Algebra is used to treat topics throughout the course. Hours: lecture 3, laboratory 2.

108 Meteorology

4 credits. (Core) General studies of causes, effects, and distribution of atmospheric phenomena. Laboratories include collection and analysis of weather and climatic data. Hours: lecture 3, laboratory 2.

111 Physical Geology

4 credits. (Core) Study of the physical earth incorporating its materials, processes, and forms. Topics include minerals, rocks, volcanoes, glaciers, earthquakes, and plate tectonics. Hours: lecture 3, laboratory 2.

112 Historical Geology

4 credits. (Core) Study of the history of the earth and its life forms, as well as methods utilized to decipher the earth's past. Hours: lecture 3, laboratory 2. *Prerequisite Earth Science 111.* Spring semester.

301 Mineralogy/Petrology

3 credits. (Core) Introduction to systematic crystallography and mineralogy, stressing identification and associations. Igneous and metamorphic petrology includes genetic processes, and microscopic and hand specimen petrography. Hours: lecture 2, laboratory 2. *Prerequisite Earth Science 111.* Fall semester.

370-379 Special Topics in Earth Science

Variable credit. (Core) Study of an advanced topic, experimental or theoretical, of special interest to the student. *Prerequisite permission of instructor.*

481-489 Independent Study

Variable credit. (Core) Students are required to define and do significant research on a problem in the earth sciences. *Prerequisite six credits above 100-level courses and permission of instructor.*

DEPARTMENT OF POLITICAL SCIENCE

Associate Professors Lamontagne, Selcher
(*Chairman*), Worman

Bachelor of Arts

Through the liberal arts blend of social science and the humanities which is political science today, the Department seeks to assist the student in thinking clearly and logically about political questions facing the community, state, nation, and world. The Department perceives three principle approaches to the discipline: the normative approach considers the values and ethical choices inherent in public policy; the empirical approach employs techniques to analyze how political systems function; the policy-oriented approach encourages the individual to responsible and informed action as citizen, government official, lawyer, or businessman. A major in political science provides preparation toward a career in party or interest group politics, law, public administration, regional and urban planning, personnel and public relations, teaching, publishing, communications, the diplomatic corps, political research, and consulting, among others. Beyond its worth in career terms, the study of politics and government can lead to more effective pursuit of one's political interests as a civic responsibility or as an avocation.

MAJOR IN POLITICAL SCIENCE

Required courses comprise the principal subfields of the discipline: Political Science 117, 118, 202, 205, 301, 308, and 398. The remaining 12 hours may be chosen from any combination of department offerings for a total of 33 hours. General electives from the other social sciences are encouraged, with Sociology 301 strongly recommended.

CERTIFICATION IN SOCIAL STUDIES FOR SECONDARY SCHOOLS INTERDISCIPLINARY SOCIAL SCIENCE MAJOR FORESTRY AND ENVIRONMENTAL MANAGEMENT MAJOR

The Department participates in the secondary school certification in social studies program, the interdisciplinary social science major, and the forestry and environmental management major, offering a political science concentration in each. Students with interests in these areas should consult the detailed descriptions in the interdisciplinary section of this catalog, page 89.

Variable credit. Designed to offer independent study to advanced students, making use of techniques of political science in specific problem areas not included in the Department's regular offerings.

DEPARTMENT OF PSYCHOLOGY

Associate Professors Cheung, Dennis,
Ellsworth, Jenkins
Assistant Professor Zanni (*Chairman*)

Bachelor of Arts; Bachelor of Science

The Psychology Department curriculum presents psychology as a scholarly discipline, as a science, and as a profession. As such, the curriculum examines principles and theories of behavior, involves students in conducting and evaluating research, and familiarizes students with the application of such theories and research skills to individual and social problems. Students are prepared for careers in human services or education as well as for graduate or professional training in education, counseling, religion, and business, and in clinical, experimental, and applied psychology.

The Department offers two degree programs: one leading to the Bachelor of Arts in Psychology, and one leading to the Bachelor of Science in Psychology. In addition, psychology concentrations are offered for students pursuing the interdisciplinary social science major or the secondary education certification in social studies. Students interested in either of these programs should consult the detailed descriptions in the interdisciplinary section of this catalog, page 89.

Required courses for the bachelor of arts degree are Psychology 105, 213, 214, 317, 318, 321, 402; one of the following: 413, 414, or 416; and psychology electives for a minimum of 33 semester hours. Students are strongly urged to complete Biology 111, 112 as their science electives. Required courses for the bachelor of science degree are identical to those for the bachelor of arts degree with three exceptions: (1) Students are required to take Biology 111, 112 as the science elective; (2) they must take three credits of computer science; (3) there is no modern language requirement.

105 General Psychology

3 credits. (Core) An introduction to the study of behavioral science including consideration of motivation, learning, personality, and sensory and perceptual processes.

213 Modes of Psychological Inquiry I

4 credits. (Core) An introduction to the methods of psychology. Emphasis on research design and data analysis as the basis for evaluating psychological literature. Consideration is given to the philosophy of science. Hours: lecture 3, laboratory 2. *Prerequisite Psychology 105.* Fall semester.

214 Modes of Psychological Inquiry II

4 credits. (Core) A continuation of 213. A consideration of research methods and data evaluation as they relate to the construction of psychological theory. Students design and conduct research on contemporary psychological questions. Hours: lecture 3, laboratory 2. *Prerequisite Psychology 213.* Spring semester.

215 Industrial and Organizational Psychology

3 credits. (Core) An introduction to the principles of psychology involving the problems of people at work; topics include personnel selection, training, performance evaluation, motivation, and human factors research. *Prerequisite Psychology 105.* Fall semester.

225 Human Development I

3 credits. (Core) An introduction to child development. Emphasis on prenatal, infancy, early childhood, and middle childhood development. Hours: lecture 2, laboratory 1. *Prerequisite Psychology 105 or Sociology 101.*

226 Human Development II

3 credits. (Core) A continuation of 225 with emphasis on developmental processes of adolescence through old age. Special consideration on the biological, social, and cognitive influences of development. *Prerequisite Psychology 225 or parallel course in another department.* Spring semester.

235 Social Psychology

3 credits. (Core) An introduction to the application of psychological principles to the understanding of social phenomena, including social structure, the socialization of the child, interpersonal processes, attitude change, affiliation, and group processes. *Prerequisite Psychology 105.*

317 Learning

4 credits. (Core) Study of major theories, methods, and empirical findings in the area of both human and animal learning. Students conduct various animal conditioning experiments. Hours: lecture 3, laboratory 2. *Prerequisite Psychology 214.* Fall semester.

318 Statistics

3 credits. (Core) A discussion of psychological statistics, emphasizing analysis of variance, varieties of correlation, errors of measurement, and selected non-parametric procedures. *Prerequisite Psychology 213.* Spring semester.

321 Theories of Personality

3 credits. (Core) A critical survey of the major theories of personality, including a study of their origin, related research, and application to understanding personality development. *Prerequisite Psychology 105.* Fall semester.

322 Abnormal Psychology

3 credits. (Core) A study of neuroses, psychoses, and personality disorders with an emphasis upon examining case material in detail. Attention is given to diagnosis, empirical findings regarding etiology and treatment, and to psychoanalytic, behavioral, and existential theories of psychopathology. *Prerequisite Psychology 105.*

333 Tests and Measurements

3 credits. (Core) An introduction to the standardization, validity, and reliability of psychological tests, including the study of standardized tests and their interpretation. Hours: lecture 2, laboratory 2. *Prerequisite Psychology 105.* Fall, 1980.

370-379 Special Problems in Psychology

Variable credit. (Core) Directed study of topics not otherwise covered in the curriculum. Offered when student interest and faculty availability justify. *Prerequisite permission of instructor.*

387 Psycholinguistics (Modern Language 387)

3 credits. (Core) An introduction to the nature of language and its relation to human thought and communication. This course concerns the child's intuitive acquisition of syntax (generative grammar) as perceived by Noam Chomsky and his followers. Topics treated include aphasia (loss of speech), dialect investigation, phonology. *Prerequisite permission of instructor.*

402 History and Systems of Psychology

3 credits. (Core) A study of major historical systems in psychology, including the evolution of various positions in contemporary psychology and attempts to reconcile these positions. *Prerequisite Psychology 214.* Spring semester.

413 Perception

3 credits. (Core) A study of the theories and empirical findings in the area of sensory and perceptual functioning with emphasis upon visual processing. Students will be expected to conduct a research project. *Prerequisite Psychology 214 or permission of instructor.* Fall, 1979; Spring, 1981.

414 Cognition

3 credits. (Core) A study of selected investigations in memory, attention, information processing, and thought. Students may be asked to conduct laboratory studies. *Prerequisite Psychology 214.* Fall, 1980.

416 Motivation

3 credits. (Core) A study of various topics within the field of motivation. Psychological as well as physiological data will be considered. *Prerequisite Psychology 214.* Spring, 1980.

471-472 Field Study

2-6 credits. (Core) Supervised training and experience in a professional setting related to psychology plus individual meetings and seminars with faculty. Placement depends on the student's interests and professional goals. *Prerequisite permission of instructor.*

480-489 Independent Study in Psychology

Variable credit. (Core) This course offers the mature student the opportunity independently to pursue educational experiences not otherwise available in the curriculum. *Prerequisite permission of instructor.*

491-492 Research Practicum

Variable credit. (Core) Research in psychology under the close supervision of a faculty member. Subjects for research are chosen in an area of interest to both persons. Offered by individual faculty-student arrangement. *Prerequisite Psychology 214, permission of instructor.*

DEPARTMENT OF RELIGION AND PHILOSOPHY

Professors Clemens, Puffenberger, Ritterspach
(*Chairman*), Snowden, Sutphin

Bachelor of Arts

Considering the heritage of religion and philosophy, the Department seeks to broaden the student's liberal arts curriculum by pursuing creative ventures which often cross over traditional disciplinary lines. While committed to the Judaeo-Christian tradition, the Department does not profess a single denominational consensus; it operates in the midst of a complex and pluralistic religious field. The Department encourages in the student a reflective stance which focuses on the basic philosophies, value systems, and faith expressions of mankind as means of preparing the student for seminary, graduate school, social work, counseling, and journalism, among other fields.

A major shall complete 33 hours of course work in the Department beyond the six hours required in the General Education Core. At least 27 hours of this course work must be above the 100-level. All majors will be required to complete a six-hour senior research project to be supervised and read by at least two members of the Department.

Students seeking a double major shall complete 24 hours of course work in the Department beyond the six hours required in the General Education Core. At least 18 hours of this course work must be above the 100-level and must include one three-hour Independent Study (Religion or Philosophy 480-89). Students who desire a double major shall declare their intentions to the Department during their junior year.

RELIGION

105 The Bible: Themes and Issues

3 credits. (Core) An introduction to the scriptures of Judaism and Christianity with special emphasis upon their original setting in life. An important aspect of the course is familiarization with techniques of Bible study.

115 Religions of the Modern World

3 credits. (Core) An exploration of the experiential meaning of "religion," as well as some of its classical statements, interpretations, and traditions. A survey of various Eastern and Western religious traditions from phenomenological, cultural, and comparative points of view.

125 Contemporary Religious Issues

3 credits. (Core) A constantly changing survey of relevant problems and issues on the contemporary religious scene with primary emphasis upon the thought patterns rather than the institutional forms of the Judaeo-Christian faith.

201 Introduction to the History, Literature, and Faith of Israel

3 credits. (Core) A study of the history of Israel as a basis for understanding the literature of the Old Testament and Biblical ways of faith; an introduction to the various tools of Biblical criticism. Fall semester.

202 Introduction to the History, Literature, and Faith of Christianity

3 credits. (Core) A survey of New Testament history, an orientation to the literature of the New Testament, and an appreciation of the conditions which gave rise to Christianity. Spring semester.

221 Western Religions

3 credits. (Core) A study of the major religions of the Near East and the Western hemisphere. Primary emphasis on a historical and comparative study of Judaism, Christianity, and Islam. Fall semester.

222 Eastern Religions

3 credits. (Core) A sympathetic encounter with the major living religions of the Far East with emphasis upon understanding their diverse cultural expressions through comparative study: Hinduism, Buddhism, Jainism, Confucianism, Taoism, Sikhism, and Shinto. Spring semester.

230 Religion in America

3 credits. (Core) A study of the rich diversity of religious America within the setting of the larger cultural and social experience. Emphasis on the uniquely American religious experience, and the identity and integrity of each separate tradition.

231 Contemporary Theology

3 credits. (Core) A deeper exposure to some aspect of theological thinking or to the study of a particular theologian or group of theologians. Religion 125 recommended. Fall, alternate years.

301 New Testament Greek I

3 credits. An introduction to the fundamentals of reading *koine* Greek, the language of the New Testament. Fall semester.

302 New Testament Greek II

3 credits. A continuation of 301 with emphasis on mastery of the grammar; commencement of reading in the New Testament itself. *Prerequisite Religion 301.* Spring semester.

310 Archaeology and the Bible

3 credits. The significance of recent discoveries in Biblical archaeology in Israel, with further consideration of discoveries in Mesopotamia, Egypt, and Syria. Generally, field work in Lancaster County excavations will be a part of the course. *Prerequisite Religion 201.* Spring, alternate years.

320 Biblical Theology

3 credits. A study of the nature and meaning of the redemptive acts of God in the history of the Hebrews and early Christians. *Prerequisite Religion 201, 202.* Spring, alternate years.

330 Anabaptist and Pietistic Movements

3 credits. A study of the historical and theological backgrounds of the Anabaptist and Pietistic movements as they relate to the Church of the Brethren and other denominations within the context of "The Believer's Church." Spring, alternate years.

340 History of Christian Thought

3 credits. A survey of representative thinkers in the history of the Christian Church and an examination of the central doctrines of the Christian faith. Religion 125 recommended. Fall, alternate years.

370-79 Seminar in Religion

3 credits. An intensive study of a selected area within the sphere of religious faith. This course rotates among the departmental staff and includes topics such as the following: liberation theology, religion in America, evangelical theology, civil religion in America, Hebrew, the Buddhist tradition, esoteric religions. *Prerequisite 12 semester hours of departmental coursework or permission of instructor.*

480-89 Independent Study

Variable credit. Upon the student's initiative a project of study and research may be undertaken with the supervision of a faculty member in the Department. The senior research project, required of all majors, will normally be registered as a six-hour independent study during the student's senior year. For double majors the requirement is a three-hour independent study.

PHILOSOPHY**105 Contemporary Philosophical Issues**

3 credits. (Core) Concerns itself with issues such as human freedom, the search for the self, and meaning in human life. These issues are introduced by means of selected literary and philosophical texts.

115 Contemporary Ethical Issues

3 credits. (Core) An examination of current issues with attention to the way in which moral norms function within the individual and the society. Emphasis upon heightened self-awareness and the perspective of social ethics.

201 Ancient and Medieval Philosophy

3 credits. (Core) A comparative study of the Platonic and Aristotelian views of life, treating them as metaphors of life rather than as speculations about the nature of life. Fall semester.

212 Aesthetics

3 credits. (Core) An inquiry into the nature of creativity in the areas of art and science, beginning from the assumption that by comparing and contrasting creativity in these two areas the student comes to a greater understanding of artistic creativity. Spring semester.

255 Advanced Ethics

3 credits. (Core) A constantly changing inquiry into the values, norms, and thought forms used in the areas of bio-ethics, environmental ethics, business ethics, and the ethics of conflict and social change.

310 Contemporary Philosophy

3 credits. Study of selected primary sources in existentialism and phenomenology in order to understand some of the more important philosophical assumptions of contemporary culture. Fall semester.

320 Philosophy of Religion

3 credits. A study of man's rational efforts to establish the validity of the religious perspective with particular emphasis on theism, the proofs for the existence of God, and the nature of evil. Spring semester.

340 Modern Philosophy

3 credits. Reading and discussion of primary sources from the writings of Descartes, Spinoza, Leibnitz, and Kant. Offered on demand

370-79 Seminar in Philosophy or Ethics

3 credits. A constantly changing specialized study within the field of philosophy or ethics featuring such areas as existentialism, philosophy of language, communal lifestyles, philosophy East and West. *Prerequisite 12 semester hours of departmental course work or permission of instructor.*

480-89 Independent Study

Variable credit.

DEPARTMENT OF SOCIOLOGY-ANTHROPOLOGY- SOCIAL WORK

Associate Professors Eisenbise Kraybill
(*Chairman*), Lehr, Long, S. Raffield
Assistant Professor Iacono-Harris (*Director of
Social Work Program*)

Bachelor of Arts; Bachelor of Science

The programs in this department provide for the study of interpersonal and intergroup relationships, and the growth, changes, structures, and processes of human society. The courses reflect the philosophical tradition of service of Elizabethtown College and meet the challenges which arise from the struggles of increasing urbanization.

Students majoring in sociology, social work, and anthropology go to graduate school seeking higher degrees in public health, hospital administration, urban and regional planning, social work, law, sociology or anthropology. Some move directly into careers in personnel work, state or municipal police forces, both adult and juvenile probation, private and governmental social welfare agencies, and in other fields where knowledge of the interrelationships of society is important.

The Department offers four basic programs leading to either a bachelor of science or a bachelor of arts degree. These degrees differ only in the Core requirements of the College. The *program in sociology* emphasizes theoretical and quantitative approaches so that the student can easily move into graduate programs or into career opportunities. The *program in sociology-anthropology* stresses basic anthropological principles and an acquaintance with the diversity of world cultures. The *program in social dynamics* is suggested for the student who desires an understanding of man in his physical and social environment, but who does not intend to seek an advanced degree; maximum flexibility is offered. The *program in social work* recognizes both the rural and urban environment of the Elizabethtown College community and seeks to prepare students for professional social work practice in either setting. Courses and field experiences emphasize the distinctiveness and the similarity of various social service delivery systems. The program is accredited by the Council on Social Work Education.

The Department also participates in the secondary education certification in social studies and in the interdisciplinary social science major, offering sociology/anthropology concentrations in each. Students interested in either area should consult the detailed descriptions in the interdisciplinary section of this catalog, page 89.

Courses required for the sociology program are Sociology 101, 201, 301, 310, and 311. In addition, the student must elect five sociology-anthropology courses for a total of 30 hours.

The sociology-anthropology program requires five courses in sociology: Sociology 101, 201, 301, 310, and 311. In addition, the student must elect five anthropology courses. The program in social dynamics requires Sociology 101 and 201. In addition, the student must elect two courses in political science, two in psychology, one in economics, and eight in sociology-anthropology.

The social work program requires the following courses: Sociology 101, 225; Psychology 105, 225, 226; Political Science 118; Economics 101; Mathematics 151; Communication Arts 105 (or passage of competency test); Social Work 222, 240, 325, 327, 329, 345, 346, 351, 470, 471, 498; plus 12 credits selected from among sociology, anthropology, psychology, political science, and economics, directed toward the student's professional goal and approved by the social work adviser.

SOCIOLOGY

101 Introduction to Sociology

3 credits. (Core) Basic concepts and theories relating to the study of man with emphasis on fundamental sociological methods and approaches.

201 Principles of Sociology

3 credits. (Core) Introduction to the methods of social research and theory. Topics include the history of the discipline, the meaning and use of key concepts, and varied approaches to the study of sociology. *Prerequisite Sociology 101*. Fall semester.

212 Population

3 credits. (Core) Population, its size, growth, trends, composition; the relation of population units in their various aspects to economic, social, political, and other major forces, trends, and institutions.

215 Criminology

3 credits. (Core) Sociological approaches to the study of crime, with emphasis on current sociological theory and research; special consideration of the judicial system and penology.

217 Sociology of Religion

3 credits. (Core) An analysis of the role and function of religion and religious institutions in society; a study of religion as a social and cultural system.

220 Race and Ethnic Relations

3 credits. (Core) Study of racial and other minorities in the United States, and their relationship with dominant groups. Includes study of discrimination, prejudice, racial myths, and methods of reducing intergroup tensions.

225 Human Development Seminar

2 credits. (Core) Focus on selected sociological concepts relevant to human development. *Corequisite Psychology 225.*

301 Social Statistics

3 credits. (Core) Application of the concepts of Mathematics 151, Probability and Statistics, to particular statistical procedures used in sociological research and literature. *Prerequisite Mathematics 151.* Fall semester.

305 Marriage and the Family

3 credits. (Core) A brief comparative view of different family patterns; a functional approach to questions related to both premarital and postmarital aspects of married and family life in our American culture.

310 Methods of Social Research

3 credits. (Core) Basic procedures of sociological research, including research design, sampling, measurement, and data analysis. *Prerequisite Sociology 201, 301; corequisite or prerequisite Sociology 311.* Spring semester.

311 Sociological Theory

3 credits. (Core) An examination of the nature of theory and an analysis of sociological theories from early times to the present day with special emphasis on the major paradigms of contemporary sociology. *Prerequisite Sociology 201, 301; corequisite or prerequisite Sociology 310.* Spring, alternate years.

340 Group Dynamics

3 credits. (Core) A consideration of empirical research in group dynamics within the larger attempt to integrate a theoretical understanding of group dynamics with its experiential application to everyday life.

342 Modern Corrections

3 credits. (Core) An overview of the origins, processes, organization, and contemporary trends of corrections for juveniles and adults, including an examination of current issues and alternatives to correctional policies.

344 Gerontology

3 credits. (Core) The study of several interrelated problem areas of the aged: physiological, psychological, and social.

347-351 Topics in Urban Society

3 credits. (Core) A selection of topics important for understanding the urban environment. These may vary from year to year but will cover such topics as urban land use; an analysis of the skills, methods, and policies that ultimately would result in a socially suitable urban community; and environmental perception.

371-380 Special Topics in Sociology

3 credits. (Core) Readings and discussion of topical areas of sociology. Topics chosen in accord with the needs and interests of the participants.

471 Internship

Variable credit. Applied field instruction in a subfield of the discipline chosen to meet the needs of the student. *Prerequisite permission of instructor.*

481-491 Independent Study in Sociology

Variable credit. (Core) Offers to advanced students the opportunity for independent study, making use of sociological approaches, in areas not included in the regular offerings within the Department. *Prerequisite permission of instructor.*

498-499 Research Seminar

Variable credit. Research in sociology under the close supervision of the instructor and with peer discussion and criticism. A completed research experience is required. *Prerequisite permission of instructor; prerequisite or corequisite Sociology 310, 311.*

ANTHROPOLOGY**201 Physical Anthropology**

3 credits. (Core) An introductory course in the study of human beings as physical organisms, their place in nature, their biological development and differentiation, and their early cultural attainments. Fall semester.

202 Cultural Anthropology

3 credits. (Core) An introductory course in the study of culture, its nature and characteristic features, with special attention to language, kinship, and religious systems, including a survey of the theories of culture and the methods for studying it. Spring semester.

307 Peoples and Cultures of Africa

3 credits. (Core) Ethnographic and cultural analysis of the folk background and contemporary customs of the peoples of sub-Saharan Africa with special attention to the problems of culture change.

308 Peoples and Cultures of Latin America

3 credits. (Core) Ethnographic and cultural analysis of the folk background and contemporary customs of the peoples of Latin America with special attention to the problems of culture change.

311 World Cultures

3 credits. (Core) A survey of some of the peoples and cultures of the world from early times to the present with emphasis on physical, cultural, linguistic, and demographic factors. Fall semester.

360 Sociocultural Change

3 credits. (Core) Theoretical perspectives on sociocultural change and a consideration of the mechanisms, patterns, and strategies of change.

371-380 Special Topics in Anthropology

3 credits. (Core) Readings and discussion of topics in anthropology chosen in accord with the needs and interests of the participants. Past topics have included Indians of North America, archaeology of Mexico, ethnography of Mexico, and primitive religion.

410 Medical Anthropology

3 credits. (Core) An examination of the four major areas of medical anthropology: ecology and epidemiology, ethnomedicine, sociocultural dimensions of health, and medical systems under acculturation.

481 Independent Study in Anthropology

Variable credit. (Core) Designed to give the advanced student in anthropology the opportunity to pursue specialized topics not regularly offered.

SOCIAL WORK**222 An Introduction to Social Welfare and Social Work**

3 credits. The historical, philosophical, and sociological perspectives of social welfare and social work and their embodiment in specific social service agencies, including an assessment of the impact of discrimination. Field trips to social service agencies. *Prerequisite* Sociology 101, Psychology 105. Fall semester.

240 Basic Helping Processes

3 credits. Skills of providing effective human service, with emphasis on an understanding of human behavior and needs, the role of the helper, and various approaches to problem solving. Laboratory training. Spring semester.

325 Rural Social Welfare Systems

3 credits. The development and organization of the rural community and its network of services intended to relieve community, family, and individual problems. Topics include the relation of policy to social goals in various programs, the values of the social work profession, and the impact of institutional discrimination. *Prerequisite* Social Work 222. Spring semester.

327 Urban Social Welfare Systems

3 credits. On-site study of a large urban area with emphasis on urban social problems and social service systems and on comparisons between urban and small town-rural areas. *Prerequisite* Social Work 325. Mini-term.

329 State and National Social Welfare Systems

3 credits. Study of state and national social welfare policies and systems with emphasis on the relation of social problems, such as poverty, insecurity, and unequal opportunity, to social, economic, and political systems. *Prerequisite* Social Work 327, Political Science 118, Economics 101. Fall semester.

345 Generalist Social Work Practice

3 credits. Functions of the generalist social worker explored in light of theories of social systems, problem-solving, and helping processes. The impact on social change of variously-sized client systems, racism, social class, ethnic consciousness, sexism, and ageism. "Volunteer service" required. *Prerequisite* Social Work 240. Fall semester.

346 Variant Approaches to Social Work Practice

3 credits. Builds upon the generalist approach by studying various approaches such as crisis intervention, reality therapy, behavior modification, case work, group work, neighborhood develop-

ment, and others. Application of content through concurrent field instruction. *Prerequisite Social Work 345; corequisite Social Work 470.* Fall semester.

351 Social Work Research

3 credits. Fundamental instruction in understanding current research in social work and in applying this knowledge through the course project. *Prerequisite or corequisite Mathematics 151.* Spring semester.

370-379 Special Topics in Social Work

3 credits. Reading and discussion on topical areas of social work. Topics will be chosen in accord with the needs and interests of the participants.

470 Introductory Field Instruction

3 credits. Supervised field instruction for at least 200 hours in an agency. Student begins to assume responsibility with client systems in such ways as monitoring tasks, providing support, conducting group activities, and assisting the social worker with other professional responsibilities. *Corequisite Social Work 346.* Fall semester.

471 Advanced Field Instruction

14 credits. Supervised field instruction for at least 392 hours plus a weekly on-campus seminar. Students proceed from an "assistant" position to one of complete client responsibility under direct supervision. Roles students assume may include advocate, enabler, social broker, and program planner. *Prerequisite permission of instructor; corequisite Social Work 498.* Spring semester.

480-489 Independent Study in Social Work

Variable credit. Opportunity for advanced students independently to pursue study otherwise not available in the curriculum. *Prerequisite permission of instructor.*

498 Senior Seminar

3 credits. Final course integrating the theory from preceding courses with the professional experience of field instruction. A major project required. *Prerequisite Social Work 470; corequisite Social Work 471.* Spring semester.

SPANISH

See Department of Modern Languages, page 66.

Interdisciplinary Programs

FORESTRY AND ENVIRONMENTAL MANAGEMENT

Bachelor of Science

The College offers a cooperative program with Duke University which leads to a bachelor of science degree from Elizabethtown and a Master of Forestry or Master of Environmental Management from Duke. The student who undertakes this major gains a wide exposure to the liberal arts through fulfilling the College's General Education Core in addition to courses in the student's major, and gains professional training at Duke in such areas as forest resource production, resource science, resource policy and economics, or other individually tailored programs.

In this program the student spends three years at Elizabethtown College, fulfilling the General Education Core requirements, and two years at Duke's School of Forestry and Environmental Studies. In the first year at Duke the student completes the undergraduate degree requirements and is awarded the bachelor of science degree from Elizabethtown. After an additional year, Duke awards the degree of Mastery of Forestry or Master of Environmental Management.

In order to prepare students for the professional program at Duke, the College offers a pre-forestry and environmental management program with major and minor concentrations in biology, business, and political science; this program is detailed below. However, any undergraduate major can be considered for admission to Duke; such students should take at least one year of biology, mathematics, and economics. Students interested in this field should be aware that although neither the program at Elizabethtown College nor the undergraduate program at Duke University is accredited by the Society of American Foresters, the graduate program at Duke does meet the accreditation requirements.

Admission to Duke is by application, and is based on an evaluation of a student's undergraduate record, Graduate Record Examination scores, letters of recommendation, and interviews.

There are variations of the schedule herein described. For further details contact Mr. Ron Laughlin.

Majors shall complete all General Education Core requirements for the bachelor of science degree. Within the Core areas the following courses should be taken:

Mathematics Core (six hours): Mathematics 117, 118; or 101, 121; or 151, 121. If 151 is not taken for Core, it is strongly recommended as an elective.

Science Core (eight hours): Majors with a concentration in biology should take chemistry; majors with concentrations in business or political science should take biology.

Social Science Core (nine hours): three hours of the nine hours must be in history, psychology, or sociology/anthropology.

Each student will also complete a major concentration in either biology, business, or political science, and two minor concentrations totaling 18 hours in the other two areas, with at least six hours in each area.

Biology: Major concentration recommendations are Biology 111, 112, 313-315, 321, and two courses from Biology 331, 332, 347, 235, and 215-515. Minor concentration recommendations are Biology 111, 112, 331; if only six hours are elected, they should be Biology 111, 112.

Business: Major concentration recommendations are Accounting 107, Computer Science 125, Economics 101, Business Administration 265, and either of the following two options: Accounting 108 and Economics 102, or Business Administration 331, 332. Minor concentration recommendations are any combination of Accounting 107, Economics 101, Computer Science 125, Business Administration 265. Economics 101 is, however, strongly suggested.

Political Science: Major concentration recommendations are Political 117, 118, 303, 308, 471. Minor concentration recommendations are Political Science 308, 471; if only six hours are elected, they should be Political Science 471.

GENERAL SCIENCE CERTIFICATION

Bachelor of Science

Elizabethtown College offers a secondary education certification program in general science which is designed to lead to a general science teaching certificate in secondary education with a major concentration in biology, chemistry, or physics. The program aims to develop a comprehensive background for teachers in order that they may be better qualified to teach science in the general science curricula of junior high and middle school programs as well as in high school curricula. The requirements of each concentration include a broad exposure to the other sciences and to mathematics, as well as to the instruction and experience in teaching provided by the professional education sequence.

The specific requirements for each of the concentrations follow:

Biology: a minimum of 24 hours in biology which must include Biology 111, 112, 215 and 515, 313 and 513; one course selected from Biology 212, 331, 235, 332, 347, 341; one course selected from Biology 324-524, 321, 322-522; Chemistry 101, 102; Physics 203, 204; two courses from Earth Science 111, 107, 108; Mathematics 101-121, or 117-118. Psychology 105, Education 215, 225d, 225e, 305, 310, 472.

Chemistry: a minimum of 24 hours in chemistry which must include Chemistry 101, 102, 201, 202; and eight hours from among Chemistry 305, 315, 333, 341, 343, 344, 351, 352; Biology 111, 112; 2 courses from Earth Science 111, 107, 108; Physics 132, 231; Mathematics 101, 121, 122; Psychology 105; Education 215, 225d, 225e, 305, 310, 472e.

Physics: a minimum of 24 hours in physics which must include Physics 132, 231, 232, 343, 404; five or more additional credits in physics and drawing; Biology 105, 106, or 108; Chemistry 101, 102; two courses from Earth Science 111, 107, 108; Mathematics 101, 121, 122; Psychology 105; Education 215, 225d, 225e, 305, 310, 472.

SOCIAL SCIENCE

Bachelor of Science

The interdisciplinary social science major provides students with a broad understanding of society in the diversity and complexity of its component strands: its history, its political institutions and economics, the sociology and psychology of its members, both individually and in their various relations. In this program students major in one of the five social sciences and develop two complementary minors. Majors and minors are chosen from among a list of approved courses in the disciplines of history, political science, economics, sociology/anthropology, and psychology. Along the way the student will be exposed to courses in all of these areas and will gain technical skills in either computer science or statistics, or both. In the senior year the student will have an opportunity formally to integrate these courses, drawing upon all his social science skills and knowledge in preparing an interdisciplinary solution to an important social science problem as part of a capstone Seminar in Social Science.

Social science majors are required to complete courses in all of the social science areas: economics, history, political science, psychology, and sociology/anthropology. Students must complete one 24-hour major in one of these areas, and two 15-hour minors in two other areas; there is an additional three-hour distribution requirement in each of the remaining two areas. If history is selected as one of the three-hour distribution requirements, an additional history course will be needed to fulfill the six-hour General Education Core requirement. All majors must take Social Science 498 during their senior year.

The following courses are required for the various options available to the social science major:

Economics: The 24-hour major must include Economics 101, 102, 301, 302, and 12 elective hours in economics. The 15-hour minor must include Economics 101, 102, 301 or 302, and six elective hours in economics. The three-hour distribution requirement must be Economics 101.

History: The 24-hour major must include History 105, 201, 202, 390, one European course beyond 105, one course in non-United States, non-European history, and six elective hours in history. The 15-hour minor must include History 105, 201, 202, and six hours of electives in history. The three-hour distribution requirement must be History 105. (One other history course must be taken to fulfill Core.)

Political Science: The 24-hour major must include Political Science 117, 118, 202, 205, 301, 303 or 308, 398, and a three-hour elective in political science. The 15-hour minor must include Political Science 117, 118, 202, 205, and a three-hour elective in political science. The three-hour distribution requirement must be Political Science 117.

Psychology: The 24-hour major must include Psychology 105, 213, 214, and 13 elective hours in psychology. The 15-hour minor must include Psychology 105 and 12 elective hours in psychology. The three-hour distribution requirement is generally Psychology 105.

Sociology/Anthropology: The 24-hour major must include Sociology 101, 201, 301, 310, 311, and nine elective hours in sociology/anthropology. The 15-hour minor must include Sociology 101, 201, and nine elective hours in sociology/anthropology. The three-hour distribution requirement is generally Sociology 101.

498 Seminar in Social Science

3 credits. A capstone course in the social sciences, including a project (usually a major research paper) which investigates an important social science problem from an interdisciplinary point of view. *Prerequisite permission of instructor.*

SOCIAL STUDIES CERTIFICATION

Bachelor of Science

The social studies certification program involves the student in two general areas of study. First, the student acquires a mastery of the various subject fields that are a part of social studies teaching. Secondly, the program requires training in the techniques of teaching, along with actual teaching experience in a social studies classroom. Upon successful completion of the requirements in these two areas, students are certified to teach social studies in secondary schools in Pennsylvania and, by reciprocal arrangements, in several other states.

The academic segment of the student's preparation calls for specified courses in economics, geography, history, political science, psychology, and sociology/anthropology. This background enables the student to prepare for teaching in all areas classified as the social studies in secondary schools. The student concentrates in depth in one of the areas. This concentration encourages thoroughness in understanding one area and also lays the groundwork for future graduate study in that subject.

Professional training in the skill of teaching is acquired through a college course on methods. In this course the student explores both the theory and the practical strategies of teaching. Finally, the student spends a semester actually teaching social studies in a secondary school classroom under the careful supervision of a competent secondary school teacher and a college professional who offer criticism, advice, and encouragement.

Detailed requirements for the social studies major follow:

Students must take one 24-hour major and three 12-hour minors. History must be included as either the 24-hour major, or as one of the 12-hour minors. All students must take Geography 105, 205, and the professional education sequence: Psychology 105; Education 215, 225d, 225e, 305, 472.

Economics: The 24-hour major must include Economics 101, 201, and 18 elective hours in economics. The 12-hour minor must include Economics 101, 102, and six elective hours in economics.

History: The 24-hour major must include History 105, 201, 202, 390, one European history beyond 105; one non-United States, non-European history; and six elective hours in history. The 12-hour minor must include History 105, 201, 202, and a three-hour elective in history.

Political Science: The 24-hour major must include Political Science 117, 118, 202, 205, 301, either 303 or 308, 398, and a three-hour elective in political science. The 12-hour minor must include Political Science 117, 118, 205, and a three-hour elective in political science.

Psychology: The 24-hour major must include Psychology 105, 213, 214, and 13 elective hours in psychology. The 12-hour minor must include Psychology 105 and nine elective hours in psychology.

Sociology / Anthropology: The 24-hour major must include Sociology 101, 201, and 18 hours planned in consultation with, and approved by the social studies advisers in the Departments of Sociology and Education. The 12-hour minor must include Sociology 101 and nine elective hours.

Education 305 Practicum in Secondary Education: Social Studies

3 credits. Experience with and demonstration of various styles and strategies in the teaching of social studies in the secondary school classroom; in-school observation and internship, or paraprofessional experience are a part of the course. *Prerequisite* Education 215; *corequisite* Education 225e.

AMERICAN STUDIES CONCENTRATION

The American studies concentration provides the student with an interdisciplinary understanding of American life and culture through a careful selection of courses largely within the College's General Education Core. Rather than selecting courses unsystematically, the student will choose courses which deal with American social or political history, literature, fine arts, religion, and so forth. During the last two years the student will take an interdisciplinary "capstone" seminar in American Studies. Thus, by taking six courses in Core and one free elective, the student will complete a 21-hour concentration which will be indicated on the final transcript. The program of study is expected to provide the student with a multifaceted understanding of his own country and culture.

When, for example, the student must choose an advanced course in history, instead of choosing unsystematically, he will select an advanced course in American History (History 201, for instance, History of the United States). Likewise, when he must choose the advanced course in literature to fulfill the Core, he will select a course in American literature (English 341, for instance, Rise of Realism in American Literature). Every semester before pre-registration the American Studies Committee will compile and distribute to all students pursuing the concentration a list of those Core courses which count in the American Studies Concentration.

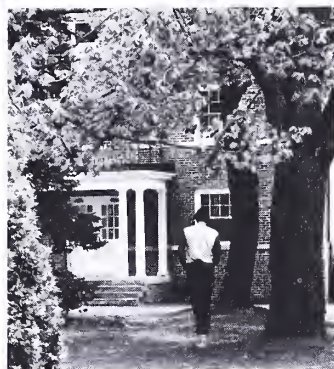
In his junior or senior year, the student will take the Seminar in American Studies (which counts as a free elective) to complete the requirements of the concentration. The Chairman of the American Studies Committee will then see to it that the student's transcript indicates "American Studies Concentration."

The concentration is especially valuable for business majors, forestry majors, and for those going into law, public service, and education. Everyone, however, regardless of his major, is likely to benefit from the concentration and is free to pursue it.

498 Seminar in American Studies

3 credits. An exploration of a particular issue or time in American life from an interdisciplinary point of view. *Prerequisite* completion of 18 hours in the American Studies concentration or permission of instructor.

Academic Regulations



Academic Regulations

REGISTRATION

Students are required to register for classes on those days designated on the college calendar. Students registering later than the days specified will be charged a late registration fee. A student may register either as a regular or a non-degree student, and as full-time or part-time. Regular students only are degree candidates, and they must be in an approved program.

A student registers for courses—not for a time or professor. There is no guarantee that a student will get every course at the time requested.

Students pre-register for the fall semester at the beginning of April. To pre-register, students must have met all financial obligations, including the payment of the pre-registration deposit for the next semester.

Pre-registration for the spring semester usually takes place during the first week of December. Master schedules and course request cards are furnished to the student approximately four weeks prior to this date, so there is ample time to make an appointment with the adviser.

CHANGE OF REGISTRATION

Courses may be added within the first week of a semester and may be dropped without academic penalty during the first four weeks. Withdrawal from a class must be approved by the academic adviser and completed through the Registrar's Office.

THE STUDENT'S PROGRAM

Each student is responsible for knowing the applicable catalog materials; with this knowledge, and in consultation with their academic advisers, students should carefully prepare their programs.

After a freshman is admitted into the College, the work of the first two years is largely in-

tended to fulfill the requirements of the General Education Core, which provides a broad education and enables the student to select a major wisely.

In the junior and senior years most curricula afford time for a wide range of electives in addition to the prescribed courses outlined for each year. Many courses have prerequisites, and students are reminded of their responsibility for taking courses in sequence. To change from one curriculum to another, the student must consult with a member of the counseling staff.

Since the completion of 128 semester hours of work is required for a degree, a student who plans to graduate in four years must include an average of 16 semester hours for each of eight semesters. However, many students wisely elect to take a lighter academic load in order to do better work, and choose to attend a summer session or a part of a fifth year.

A student with average grades may carry up to 18 semester hours of work in any given semester except the summer session, when the maximum is 14 semester hours for the 10-week period. A student who has achieved a cumulative grade point of 3.00 or above may carry up to 20 semester hours credit in a semester, or 16 semester hours credit in a summer session. For each semester hour above 18 for which a student is enrolled in a given semester, an additional fee is charged, and approval by the Dean of the Faculty is required.

Any student taking 12 or more credit hours per semester at Elizabethtown College is considered a full-time student and will pay full tuition and fees. Any student taking 11 or fewer hours per semester will pay the regular semester hour rate plus applicable fees, and will receive a library card and full use of the library facilities. In a summer session students holding a Pennsylvania Higher Education Assistance Agency (PHEAA) grant are considered full-time if they carry a minimum of 12 semester hours divided among any three terms. Tuition and fees are paid according to the schedule in the summer session brochure. For further details concerning summer school consult the summer school brochure available from the Office of the Registrar.

The student's class standing is determined on the basis of the number of credits earned. After earning 30 credits, a student is considered a sophomore; with 60 credits a junior; with 90 credits, a senior.

CLASS ATTENDANCE

Class attendance is handled individually by the faculty members. It is the position of the College that the above average student should be given some freedom of judgment as to his attendance needs, while the below average student must, of necessity, be encouraged or required to maintain a record of regular attendance.

Each faculty member will announce his attendance policy at the start of each semester. A professor may dismiss a student from a course for excessive absences. A student may appeal for reinstatement to the Academic Standing Committee.

A student should take care of absences due to ill health or other personal problems through directly consulting the professor.

CREDITS, GRADES, AND QUALITY POINTS

Credit is indicated in terms of the semester hour. Each semester hour unit signifies work completed in one 50-minute recitation, or two or more 50-minute lab periods per week for a semester of 15 to 18 weeks, or an equivalent learning experience.

Grades are reported for work as follows: A, excellent; B, good; C, satisfactory; D, poor; F, failing; W, withdrawal from class (plus the notation of the grade earned at the time of withdrawal); I, work incomplete. A grade of I may be obtained by making a formal request to the professor of the course in question. The student and the professor must sign a written agreement which specifies the nature and the quantity of the work to be completed and the projected date of completion. All grades of I received in the fall semester must be removed by April 1, Those received in the spring semester or summer session must be removed by October 1. Failure to do so results in a grade of F. A system of grade appeals may be found in the student handbook.

Quality points are given for credit as follows: for a grade of A, 4 per semester hour; B, 3 per semester hour; C, 2 per semester hour; D, 1 per semester hour; F, P, and NP, no quality points. Credits earned off-campus in programs under the jurisdiction of the College, or approved by it, or both, while the student is matriculated at the College, are considered on-campus credits. The student's rank in class at graduation is based on the credits, grades, and quality points earned at Elizabethtown College.

REPEATING COURSES

Courses which may be repeated (see below) must be taken at Elizabethtown College; any subsequent passing grade is final and is used in the calculation of semester and cumulative averages. When repeating a course a student must file the appropriate repeat registration card in the Registrar's Office. Courses which may be repeated follow:

1. A student may repeat any course in which he has received an F.
2. Ordinarily a student may not repeat a course in which he has earned a grade of D. However, upon the request of the student's adviser and the approval of the department chairman, a student may repeat a course in his major department, or a course required by the major.

PASS/NO PASS GRADING

To provide another study opportunity for the above average student, Elizabethtown College has a limited program of Pass/No Pass (P/NP) grading. In this program courses passed count towards the student's total number of credit hours, but do not count for quality points.

A student may select one course per semester to be graded in this manner under the following conditions:

1. The student must currently be of junior or senior standing (60 or more credits).
2. The cumulative average must be 2.75 or more.
3. The course must be a free elective. It must be outside the major department, may not satisfy a Core requirement, and may not be a course required by the major.

INDIVIDUAL PROGRAM ADJUSTMENTS

Academic departments reserve the right to counsel any student out of a program or major for academically related reasons. A student has the right to appeal such departmental action to the Dean of the Faculty, who will direct warranted appeals to the Academic Standing Committee.

ACADEMIC PROBATION

Academic probation means that a student is in danger of being dismissed from the College for academic reasons. Students who fall into the following categories are placed on academic probation:

<i>Semester hours in the College:</i>	<i>with</i>	<i>Cumulative Grade Point below:</i>
1-18		1.50
19-36		1.80
37-54		1.90
55-72		1.95
73 or more		2.00

It is recommended that students on academic probation limit their load to four courses or 13 semester hours, whichever is less, in any semester in which the probation exists. The summer maximum should be two courses per term.

ACADEMIC DISMISSAL

The College, upon recommendation from the Academic Standing Committee, may at any time dismiss from the College a student who is on academic probation. Normally students in their first two years of college will be dismissed after two successive semesters on probation, and students in their last two years after one semester on academic probation. However, students should be aware that all cases are handled individually by the College, and that very poor academic performance may result in dismissal at the end of any semester.

A student who is in academic difficulty or on academic probation may be requested by the Academic Standing Committee, in consultation with the student and advisers, to enroll in a special or particular program and to become involved in testing, counseling, or other developmental activities. Satisfactory performance by the student in such assignments may be interpreted by the Academic Standing Committee as satisfactory progress, and may make it unnecessary for the Committee to dismiss a student, even though the requisite number of semesters on probation has accumulated.

VOLUNTARY WITHDRAWAL FROM COLLEGE AND CLASSES

Full-time students withdraw from the College through the Counseling Center; part-time students withdraw through the Registrar's Office. For purposes of billing, room reservation, and academic responsibility, the effective date of withdrawal will be the date on which the completed official notice is returned to the Counseling Center or the Registrar's Office. A student who withdraws without notification will receive no refund and may incur the full room penalty. Failure to comply with withdrawal procedures may result in loss of the privilege of re-admission to the College and the right to a clear transcript of credits earned.

Students withdraw from classes through the Registrar's Office. The appropriate form must be signed by the student's adviser and the professor for the course. The course will not appear on the permanent record if the student withdraws on or before the Friday of the fourth week of the semester. From this time to the end of the eleventh week, a withdrawal will result either in a grade of W or W/F. All withdrawals after the end of the eleventh week of the semester receive grades of W/F unless the withdrawal is for medical reasons, in which case a W will be recorded. A grade of W/F is calculated into the student average as though it were an F.

LEAVE OF ABSENCE

A student may take a leave of absence from the College to attend one of a number of cooperative educational programs. These programs include the BCA program, attendance at the University of Ghana, a semester or a year at the Merrill-Palmer Institute, and so forth.

To arrange a leave, a student should contact the faculty coordinator or director of the appropriate program. Application must be made no later than the pre-registration period of the semester prior to the one in which the leave begins. Any administration fees for off-campus programs are payable at the time a student applies for the leave. A leave is approved upon the student's acceptance into the program.

Pre-registration information will be sent to students on leave approximately by March 15. The pre-registration card and a \$100 deposit must be returned to the Registrar's Office by May 1 to ensure a place in the College and in the courses selected.

DEAN'S LIST

A student who earns a quality point-credit ratio of 3.50 or better is regarded by the College as having performed with distinction, and that student is placed on the Dean's List of Honor Students.

SCHOLAR'S PRIVILEGE

Any student who appeared on the Dean's Honor List during the preceding semester may, with the permission of the instructor, attend any class in the College on a space available basis as a scholar's privilege without registration or credit.

DEPARTMENTAL STUDENT PRIVILEGE

Any junior or senior student may, with the permission of the instructor, attend any class within his major department on a space available basis.

ADVANCED PLACEMENT

Three ways exist for regularly admitted students to receive advanced placement with credit: The College Entrance Examination Board's Advanced Placement Program, (the College grants credit and placement for scores of 3, 4, or 5), the College-Level Examination Program (CLEP) general battery, and the successful completion of an examination prepared by an Elizabethtown College faculty member. The last option is described below in detail:

A regularly admitted student may request to be examined for credit over most catalog courses. Not included are practicum, internship, or research courses. The student must present an authorization form from the Registrar's Office (stamped by the Business Office) to the faculty member before the examination.

The faculty member may assist the student by giving a syllabus of the course and other recommendations. The examination will be comprehensive in nature and may take any form that the faculty member chooses. A fee is charged.

The result of the test should be reported immediately to the Registrar's Office.

TRANSFER OF CREDITS

Students wishing to transfer credits to Elizabethtown College should obtain a permission form from the Registrar's Office. The College will normally transfer credit (but not grades or quality points) for course work taken at another accredited institution for which a grade of C or better was obtained.

Students who have achieved junior status (60 credits) either through work at Elizabethtown College or through a combination of work at the College and another institution are not permitted to transfer additional credits from a two-year institution to the College. Such students may transfer credits from four-year institutions upon the approval of the Registrar. Students must request the Registrar's Office of the transferring institution to send an official transcript to the Registrar's Office at Elizabethtown College.

Students desiring to transfer credits from Elizabethtown College to another institution must make the request in writing to the Registrar's Office, in person or by mail, at least one week prior to the date needed.

GRADUATION REQUIREMENTS

To receive a bachelor of arts or bachelor of science degree from Elizabethtown College, the student must earn 128 semester hours credit, or in the case of engineering, medical technology, and other special programs, the number indicated in the course outline, including all of the specific courses indicated, the General Education Core requirements, and the requirements for the major field.

To receive an associate of science degree with a major in medical secretarial science, the student must earn a minimum of 64 credits including 28 credits of General Education Core courses, six credits of free electives, and the specific courses required by the major.

In order to be eligible for graduation, students must have a quality point-credit ratio of at least 2.00 with a minimum average of 2.00 in the major. Students transferring from other colleges must have a ratio of at least 2.00 in courses pursued in residence at Elizabethtown College.

Graduation requirements will be governed by this catalog and the Program Guide Book issued by the Registrar dated four years prior to a student's graduation (two years in the case of associate degree students), or by the catalog in effect at the time of graduation if the student so chooses.

Transfer students are subject to the requirements of the catalog in effect when they begin studies at Elizabethtown College. Students coming from two-year institutions may choose to be governed by the catalog dated four years prior to their graduation if they can present evidence that they planned to transfer to Elizabethtown College when they matriculated at the two-year college.

To meet graduation requirements, the student must earn on-campus credits as follows: 1) a minimum of 15 credits in the major, at least eight of which are at the upper level (normally 300 and 400-level), and 2) at least 30 of the last 60 credits.

Elizabethtown College will graduate only those students who have met the moral and financial obligations incurred in pursuit of their studies. The completion of the required number of semester hours does not in itself constitute eligibility for graduation.

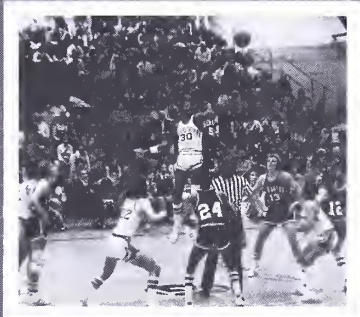
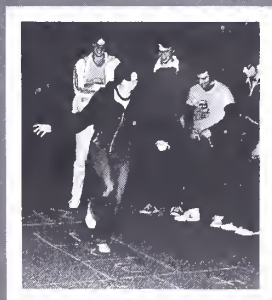
The Office of the President must be notified by anyone who plans to be graduated in absentia.

It is the responsibility of the candidate for a degree in December, May, or August to make formal written application for the degree to the Registrar by September 15 or February 15.

At the time of his graduation, a student who has achieved a cumulative quality point-credit ratio of 3.50 will be graduated cum laude; a ratio of 3.75, magna cum laude; a ratio of 3.90, summa cum laude.

Transfer students will receive honors if they have earned a minimum of 60 semester hours credit at Elizabethtown College, if they are recommended for honors by the major department, and if their averages meet the above requirements.

Campus Life



Campus Life

COCURRICULAR EXPERIENCES

Because the education of students takes place in a variety of ways, their cocurricular life is a vital and integral part of the college experience. Through participation in the many clubs and organizations approved and sponsored by the Student Senate, in academic departments, the performing arts, and intercollegiate and intramural athletics, students have the opportunity to express individual interests, to grow in their understanding of the various academic disciplines, to develop leadership skills, and to enrich their liberal education.

Honorary Organizations

Alpha Lambda Delta
Alpha Kappa Delta
Alpha Psi Omega
Delta Sigma Rho—Tau Kappa Alpha
Elizabethtown College Honor Society
Phi Alpha Theta

Clubs and Organizations

Black Student Union
Brethren Identity
Commuter Council
Campus Gold
Elizabethtown Christian Fellowship
Elizabethtown Frisbee Club
Eta Phi Sigma
International Club
Intersivity Christian Fellowship
Newman Club
Outdoor Club
Ski Club

Departmental Clubs

Accounting
Alpha Mu
American Chemical Society
Biology
Geology
History
Management
Marketing
Mathematics
Medical Technology
Music Educators
Occupational Therapy
Political Science
Pre-med
Psi Chi
Psychology
Religion/Philosophy
Society of Physics Students
Sociology
Social Work
Student Data Processing
Student Pennsylvania State Education Association
Supreme Fiction

Performing Arts

Choral Union
College Chorale
College Community Orchestra
Concert Band
Concert Choir
Jazz Band
Repertory Theatre
Sock and Buskin
String Ensemble

Athletics

Blue Jay
Fellowship of Christian Athletes
Synchronized Swim Club

Detailed information may be found in the student handbook.

Lectures and Concerts

The College presents annually a varied program of music, dance, drama, films, and lectures, featuring distinguished artists and speakers. Student organizations in the performing arts, individual student recitals, and speakers in various academic clubs not only provide further entertainment and instruction, but also permit participation of interested students.

Student Government

The Student Senate is the student arm of the College's campus government. Students are elected each spring on a representative basis from residence halls, academic departments, and off-campus residences. Student senators are responsible for assuring a student voice in the Community Congress, the College's governance structure, and for allocating funds for student activities, clubs, and organizations.

Activities Program Board

The Activities Program Board is composed of students who work with the Director of Student Activities to plan weekend and general campus social activities for the college community.

STUDENT PUBLICATIONS AND COMMUNICATIONS

Opportunity for self-expression is provided through the various student publications and radio communications:

The Etownian is a weekly newspaper published by students and distributed to all members of the college community.

The Conestogan is the college yearbook published by the senior class and available each fall.

WWEC, the college radio station, managed by the Communication Arts Department, broadcasts daily under the operation of a student staff. News of general campus interest, special features, and various types of music are carried at 640 on the AM band.

The Rudder, the student handbook and its supplement, is published each year by the Office of Student Affairs with the assistance of interested students. *The Rudder* serves as a guide and reference providing up-to-date and essential information about student life and services as well as many of the policies, rules, and regulations governing student life.

ATHLETICS

Elizabethtown College provides a varied inter-collegiate and intramural sports program. It adheres to the principles and policies of the various athletic conferences of which it is a member.

Conference Membership

Men: National Collegiate Athletic Association (NCAA)

Eastern Collegiate Athletic Conference (ECAC)

Middle Atlantic Conference (MAC)

Women: Association of Intercollegiate Athletics for Women (IAIW)

Eastern Association of Intercollegiate Athletics for Women (EAIW)

Middle Atlantic Conference (MAC)

Penn-Mar Conference (Pennsylvania and Maryland)

Facilities

The Alumni Physical Education Center houses offices, classrooms, and the Thompson Gymnasium. With seating capacity for 2400 spectators, the gym has three basketball courts, eight badminton courts, four volleyball courts, three racquetball/handball courts, and a remedial gym. Other facilities include the swimming pool and bowling lanes in the Baugher Student Center.

Outdoor facilities include two soccer fields, a field hockey field, a baseball field with dugouts, eight all-weather tennis courts, and an intramural field.

Intercollegiate Program

The sports program attracts many skilled athletes on an intercollegiate level. Intercollegiate sports for men include:

Soccer (varsity and J.V.)

Basketball (varsity)

Wrestling (varsity)

Swimming (varsity)

Baseball (varsity)

Track and Field (varsity)

Tennis (varsity)

Intercollegiate sports for women include:

Field Hockey (varsity and J.V.)

Volleyball (varsity and J.V.)

Basketball (varsity and J.V.)

Swimming (varsity)

Tennis (varsity)

Softball (varsity)

Intramural Program

Recognizing the importance of sports participation regardless of the level of a participant's skill, the College maintains a broad intramural athletic program for men and women, arranged and directed by the Director of Intramural Sports working with interested students. Intramural teams are selected from residence halls, faculty, alumni, and commuters. If there is sufficient interest several leagues are organized, according to ability levels.

Activities offered most regularly:

- Flag Football (men)
- Tennis (men, women)
- Bowling (coed)
- Volleyball (men, women, coed)
- Paddleball (men, women)

If there is sufficient interest other activities will be added. For example:

- Tennis (coed)
- Basketball (women, coed)
- Handball (men)
- Chess, (men, women)
- Softball (men, women, coed)
- Wrestling (men)
- Water Polo (men, women)
- Table Tennis (men, women)
- Badminton (men, women)

STUDENT SERVICES

Freshmen Orientation Programs

The orientation programs help students learn about the academic community and student life at Elizabethtown College. This education begins with the original mailings to accepted students and their meetings with college personnel, and continues throughout their initial experience on the campus.

Summer Orientation

All freshmen and their parents are invited to attend one of five orientation programs during the summer. During their stay on campus students and parents meet college administrators, faculty, and student leaders through a variety of seminars on college life. Students also meet individually with academic advisers to plan their fall schedule of classes.

Fall Orientation

Orientation continues in the fall when freshmen are required to arrive a few days before the upper classmen. During this orientation considerable attention is given to three areas: educational programs and requirements, college facilities, and social adjustment.

Student Center

The Baugher Student Center houses many student services and facilities. The first floor contains the Jay's Nest snack bar, campus theatre, college pool, post office, bookstore, bowling alleys, and informal lounge, as well as commuter students' lockers and student mail boxes.

The second floor houses offices for the Dean of Student Affairs, Center for Counseling and Student Development, College Chaplain, Financial Aid, Housing and Public Information, as well as the Tutor Center, Game Room, Commuter Lounge and Study, *The Etownian* and WWEC.

Center for Counseling and Student Development

The Center for Counseling and Student Development supports and assists individuals in their educational, personal, and social development. In educational development the Center helps students to develop effective study skills, to clarify academic and educational goals, and to choose majors. To facilitate exploration of those interests, aptitudes, and abilities which lie behind important academic decisions, the Center uses diagnostic tests and measurements. In personal and social development, the Center helps the student to explore and understand personal identity, attitudes, values, and motivations. Counseling sessions are considered confidential.

Counselors are also responsible for the academic advising of students who have not chosen a major. The staff also conducts a series of small group experiences in a variety of interest and need areas. Interpersonal communication, stress control, assertiveness, time management, and human potential are some of the topics explored in past experiences. Counselors are available for consultation to all members of the college community. The Center for Counseling and Student Development is located in the Baugher Student Center.

Tutor Center

A tutoring service is available to any student experiencing academic difficulty in any course. Students are encouraged to use this service to maintain good academic standing and may sign up at the Center for Counseling and Student Development. The Tutor Center is located in the Baugher Student Center.

Writing Laboratory

The Writing Laboratory provides individual assistance to students who have immediate and long-term writing problems; it is located on the ground level of Wenger Center.

Reading/Study Skills Center

The Reading/Study Skills Center provides individualized instruction in study skills and reading comprehension: effective techniques for note-taking from lectures and textbooks, methods of studying for exams and taking them, flexible reading rates and other reading problems. The Reading/Study Skills Center is located in South Hall.

Student Health Center

The Student Health Center provides health care for the student population and emergency care for the college community. The Center treats minor illnesses and injuries, encourages health education by offering health related programs throughout the year, and handles the insurance claim forms for those students who subscribe to the Student Health and Accident Insurance.

Twenty-four hour nursing coverage Monday through Friday is provided by registered nurses on duty at the Center. Weekends are covered with brief office hours on Saturday morning and an emergency call system for the remainder of the weekend. The Center will refer students to physicians in the community although, of course, students may choose the physician they wish to see. The Center also makes referrals to other community agencies and health related areas.

Before registering for freshmen classes, students entering Elizabethtown College must file the report of a physical examination performed by their physician, and submit proof of having received within the previous 12 months a tuberculosis test. The College will send health forms for the physical examination to all inquiring students. The Student Health Center is located on South Mount Joy Street.

Career Development Center

The Career Development Center is designed to assist students with their career planning, development, and job placement. The office houses a career library, maintains placement credentials, provides off-campus summer and part-time job listings, coordinates on-campus recruitment (business, industry, government, school districts, and graduate school visitations), and publishes a semi-monthly newsletter. The staff conducts and sponsors workshops, clinics, and seminars on various topics, e.g., career decision-making, career planning strategies, employability skills, and finding a job. The Career Development Center is located in Alpha Hall.

Extern Program

Each year, during one week in January, the Career Development Center conducts an Extern Program in concert with the Office of Alumni Relations. The program is designed to help a student choose a particular academic major, confirm a chosen academic major, establish more concrete career goals, or provide a brief on-the-job experience.

The program matches Elizabethtown College students with alumni sponsors who work with the student externs over the designated period of time. The externs receive no academic credit or salary; they do receive valuable first-hand experience in their field.

Campus Ministry

Because the student body of Elizabethtown College comprises individuals from many different religious backgrounds, programs sponsored by the Chaplain's Office are ecumenical in nature.

Major campus-wide religious programming is the responsibility of the Religious Life Council, a representative body convened by the Chaplain and composed of 12 individuals who represent faculty, administrators, the various organized religious clubs, and the denominational groups on campus. Programs planned by the Chaplain's Office in cooperation with the Religious Life Council include such activities as a Jewish Seder, Church of the Brethren Love Feast, emphasis on World Hunger, Bible study, sharing groups, and a weekly Sunday morning worship service.

Organized religious groups on the campus include the Fellowship of Christian Athletes, Brethren Identity, Elizabethtown Christian Fellowship, Intervarsity Christian Fellowship, and the Newman Club.

CAMPUS RESIDENCES

Accommodations

All campus residences feature double occupancy rooms, attractive lobby areas, laundry facilities, and areas for study and recreation.

Founders Residence was completed in 1971, houses 328 men and women in four separate living areas (Beahm, Falkenstein, Hertzler, Zeigler Houses), and features small group living suites.

Schlosser Residence, built in 1965, houses 206 women, and features small group suites with carpeting and air conditioning throughout.

Myer Residence was completed in 1957, houses 130 women, and contains the campus dining room.

Royer Residence, dedicated in 1962, houses 133 women.

Ober Residence, built in 1960, houses 247 men in two wings.

Brinser Residence, dedicated in 1965, houses 144 men.

Six Cooperative Houses (four female and two male): In addition to the residence hall housing listed above, the College offers other kinds of housing in order to meet the diverse needs of students in different stages of their college life. A proven success, the cooperative houses offer students small group living where house-keeping chores are shared, and food budgeting and preparation are a part of everyday life.

Commuters are provided with a multi-purpose room and adjoining study room located on the south end of the second floor of the Baugher Student Center. The Commuter Council is the official representative body of the commuter student. The Commuter Council has as its adviser the Administrative Assistant to the Director of Housing.

Closings

The College will close all of its housing units during all official vacation periods. There will be no access to the buildings during these times.

Four Year Room Contract

All new incoming freshmen who are not commuters will be expected to live in campus-owned housing for their full four years at Elizabethtown College. Commuting is defined as living at home and not in one of the local houses or housing developments. The justification for this new procedure is that good economics demands that residence halls or college-owned housing remain as close to full occupancy as possible.

Housing Office Structure

The central Housing Office is located in the Student Center. Here the Director of Housing and the Administrative Assistant coordinate the entire housing operation.

Within each residence hall area, the person responsible is the *Area Coordinator*. Responsible directly to the Director of Housing, the Area Coordinator supervises resident assistants and house management, advises residence hall councils and programs, enforces all residence hall and campus regulations, and cares for the welfare of each individual student in the residence hall.

Within each residence hall, an upperclass student called a *Resident Assistant* is in charge of each floor. Responsible directly to the Area Coordinator, the Resident Assistant must show interest and friendliness to all students on the floor and enthusiasm for activities planned with floor members, serve duty at the reception desk, handle other administrative functions in the residence hall, and enforce all residence hall and campus regulations.

Each residence hall has a *Residence Hall Council*, made up of students elected from each floor. Their primary responsibilities are to determine residence hall regulations within college guidelines, to channel residents' concerns to the Student Senate in the form of proposals, and to plan academic, cultural, social, and recreational programming for the residence hall.

STUDENT RIGHTS AND RESPONSIBILITIES

Membership in the Elizabethtown College community accords the student certain privileges and rights along with accompanying responsibilities. In an effort to ensure and protect the right to pursue the educational process, the college community as a whole must be sensitive to the welfare and behavior of its individual members.

The student assumes responsibility for awareness of and compliance with all existing rules, policies, and regulations as stated in the college catalog, student handbook, and any other official publication of the College. All new students receive a copy of *The Rudder*, the student handbook, during new student orientation.

Family Educational Rights and Privacy Act of 1974

Elizabethtown College affirms the Student's Right to Know Law (the Buckley Amendment) which protects students' access to any records directly relating to them. Guidelines are found in the student handbook.

Title IX of the Educational Amendment Act of 1972

Elizabethtown College affirms the Title IX statute which prohibits sex discrimination in any educational program or activity receiving federal financial assistance. A Title IX Committee exists to ensure compliance with the statute. A grievance procedure for Title IX concerns is outlined in the student handbook.

THE JUDICIAL SYSTEM

The Campus Judicial Board and the Appeals Board, composed of students, faculty, and administrators, have jurisdiction over violations of campus rules, policies, and regulations. The College embraces the principles of due process and individual student responsibility, and therefore initial efforts to settle violations are made individually at the lowest level of responsibility. Only when the matter cannot be resolved on a lower level is it referred to the appropriate board.

Alcohol

The College supports the statutes of the Commonwealth of Pennsylvania controlling the possession and use of alcoholic beverages by individuals under 21 years of age. It is contrary to the policy of the College for students to purchase, possess, store, or consume alcoholic beverages while under college jurisdiction.

Drugs

The College supports the local, state, and federal laws which make the possession, purchasing, distribution, and use of drugs illegal. Neither the College nor its students enjoy immunity from the statutes or their enforcement. Disregard of civil laws by students on campus is a serious violation of college policy and regulations.

Firearms, Weapons

Use of firearms, weapons, explosives, or noxious chemicals except in strict adherence to the laws of the Commonwealth of Pennsylvania or as part of the student's formal education is prohibited. Any weapons, firearms, or ammunition brought to the campus must be registered and deposited with the Department of Public Safety.

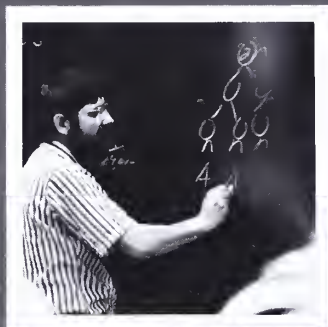
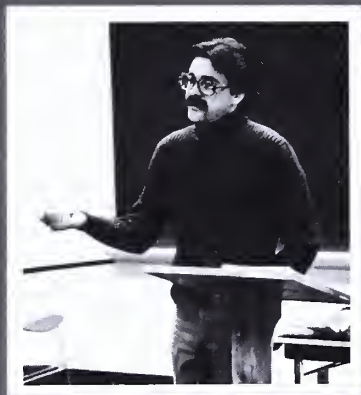
Motor Vehicles

Students are permitted motor vehicles on campus. All motor vehicles must be registered with the Department of Public Safety. Student must obtain parking decals and are bound by the motor vehicle regulations set forth in the manual published by the Department of Public Safety and distributed at registration time.

Smoking

For reasons of personal health, the College does not encourage the use of tobacco. Smoking is prohibited in classrooms, hallways, the dining room, the snack bar, lounges, and other places open to public gatherings, except residence halls.

Directory



Directory

THE FACULTY

Mark C. Ebersole, *President*

B.S., LL.D., Elizabethtown College; B.D., Crozer Theological Seminary; M.A., University of Pennsylvania; Ph.D., Columbia University (1977)

Bruce L. Wilson, *Dean of the Faculty, Associate Professor of English*

B.A., B.S., M.S., Kansas State University; Ph.D., University of Minnesota (1977)

Emeriti

Bessie D. Appgar, *Professor of Biology, Emerita*

A.B., Muskingum College; M.S., University of Pittsburgh; Ph.D., University of Pennsylvania (1946)

Charles S. Appgar, *Professor of Biology, Emeritus*

B.S., M.S., Ph.D., University of Pittsburgh (1946)

Carl J. Campbell, *Professor of English, Emeritus*

A.B., Franklin and Marshall College; M.A., University of Pennsylvania (1962)

Clarence G. Enterline, *Alumni Secretary and Director of Placement, Emeritus*

B.S., Albright College; M.S., University of Pennsylvania (1956)

Nevin W. Fisher, *Professor of Music, Emeritus*

Graduate, Blue Ridge College; Teachers' Certificate, Peabody Conservatory of Music; B.M. Eastman School of Music, University of Rochester; M. Music, Northwestern University (1951)

Elizabeth M. Garber, *Professor of Political Science, Emerita*

A.B., LL.D., Hood College; M.A., George Washington University; Docteur de l'Université, University of Paris (1966)

Vera R. Hackman, *Dean of Women, Emerita*

A.B., Elizabethtown College; A.M., Columbia University; Professional Diploma, Teachers' College, Columbia University (1944)

Ira R. Herr, *Professor of Physical Education, Emeritus*

A.B., Franklin and Marshall College; University of Pennsylvania; Temple University (1928)

Kathryn Nisley Herr, *Assistant Professor of Modern Languages, Emerita*

A.B. Lebanon Valley College (1943)

Earl H. Kurtz, *Treasurer Emeritus*

B.S., Elizabethtown College; M.A., New York University (1957)

Morley J. Mays, *President Emeritus*

A.B., Juniata College; A.M., University of Pittsburgh; Ph.D., University of Virginia; D.D., Bethany Theological Seminary (1966)

Gertrude Royer Meyer, *Professor of Music, Emerita*

Graduate in Music, Western Maryland College (1920)

O. F. Stambaugh, *Professor of Chemistry, Emeritus*

B.S., Lebanon Valley College; M.S., Ph.D., Pennsylvania State University. (1946)

Carl W. Zeigler, *Professor of Religion and Philosophy, Emeritus*

A.B., Elizabethtown College; M.Div., United Theological Seminary; D.D., Elizabethtown College (1959)

Professors

Edgar T. Bitting, *Professor of Business*

B.S., Elizabethtown College; M.B.A., University of Pennsylvania; C.P.A. (1952)

I. L. Bossler, *Professor of Mathematics*

B.S., Ursinus College; M.S., Purdue University (1959)

John A. Campbell, Jr., *Professor of English*

B.S., M.A., Ph.D., University of Florida (1968)

Anna M. Carper, *Director of the Library*

A.B., Elizabethtown College; M.S., Columbia University (1960)

Eugene P. Clemens, *Professor of Religion and Philosophy*

B.A., Goshen College; M.A., Ph.D., University of Pennsylvania (1965); sabbatical leave, spring, 1979-80

J. Thomas Dwyer, *Professor of English, Department Chairman*

A.B., M.A., Ph.D., University of Pennsylvania (1960)

J. Robert Heckman, *Associate Professor of Biology, Department Chairman*

B.S., Elizabethtown College; M.Ed., Millersville State College; Ph.D., Pennsylvania State University (1964)

Jack L. Hedrick, *Professor of Chemistry*

B.S., Elizabethtown College; M.S., University of Pittsburgh (1963)

A. F. Kish, *Professor of Business, Program Director, Continuing Education*

B.S., Rutgers-The State University; M.S., University of Delaware (1963)

Note: year indicates date of appointment at the College.

Donald E. Koontz, *Professor of Mathematics*
B.A., Juniata College; M.A., Pennsylvania State University (1961)

J. Kenneth Kreider, *Professor of History, Department Chairman*
A.B., Elizabethtown College; M.A., Ph.D., Pennsylvania State University (1964)

Henry M. Libhart, *Professor of Art, Department Chairman*
A.B., Franklin and Marshall College; Equivalent Master's Degree certificate, Commonwealth of Pennsylvania (1959-64, 1967); sabbatical leave, 1979-80

Richard L. Mumford, *Professor of History and Clinical Professor in Social Science*
A.B., University of Pennsylvania; M.Ed., Ph.D., University of Delaware (1965)

Rollin E. Pepper, *Professor of Biology*
A.B., Earlham College; M.S., Syracuse University; Ph.D., Michigan State University (1964)

Zoe G. Proctor, *Professor of Chemistry*
B.S., Elizabethtown College; M.S., Bucknell University (1959)

William V. Puffenberger, *Professor of Religion and Philosophy*
B.A., Bridgewater College; B.D., Bethany Theological Seminary; Ph.D., Boston University (1967)

John P. Ranck, *Professor of Chemistry*
B.S., Elizabethtown College; M.A., Ph.D., Princeton University (1963)

D. Paul Rice, *Professor of Education, Department Chairman*
A.B., Elizabethtown College; M.S., Ed.D., Temple University (1963)

Austin D. Ritterspach, *Professor of Religion and Philosophy, Department Chairman*
B.A., Indiana University; M.Div., Union Theological Seminary; Ph.D., Graduate Theological Union (1967)

Ronald L. Shubert, *Professor of Mathematics, Department Chairman*
B.S., Elizabethtown College; M.A., University of Kansas; D.Ed., Pennsylvania State University (1964)

Carl N. Shull, *Professor of Music*
B.S., Bridgewater College; M.M., Northwestern University; Ph.D., Florida State University (1961)

Armon C. Snowden, *Professor of Religion and Philosophy*
A.B., Elizabethtown College; B.D., Crozer Theological Seminary (1957)

Martin O. L. Spangler, *Professor of Chemistry, Department Chairman*
B.A., Bridgewater College; M.S., Ph.D., Virginia Polytechnic Institute and State University (1966)

Stanley T. Sutphin, *Professor of Religion and Philosophy, Faculty Marshall*
A.B., University of LaVerne; B.D. Bethany Theological Seminary; Th.D., Pacific School of Religion (1963)

Owen L. Wright, *Professor of Physical Education*
B.A., Bridgewater College; M.S., University of Illinois; Ph.D., University of Oregon (1961)

Robert E. Ziegler, *Professor of Science Education*
B.A., Bridgewater College; M.R.E., Bethany Theological Seminary; M.S., Ph.D., University of Wisconsin (1966); leave of absence, 1979-81

Associate Professors

Louise Baugher Black, *Associate Professor of English, Clinical Professor in English Education*
B.S., Elizabethtown College; M.S., Temple University (1968)

Ernest A. Blaisdell, Jr., *Associate Professor of Mathematics*
B.A., M.A., University of Maine; Ph.D., Temple University (1968)

Stanley K. Bowers, *Associate Professor of Education*
B.S., Millersville State College; M.Ed., Temple University (1965)

Jay R. Buffenmyer, *Associate Professor of Business, Department Chairman*
B.S., Elizabethtown College; M.P.I.A., Ph.D., University of Pittsburgh (1976)

Carl A. Callenbach, *Associate Professor of Education*
B.S., Pennsylvania State University; M.A., Appalachian State University; D.Ed., Pennsylvania State University (1972)

Robert C. Cheung, *Associate Professor of Psychology*
B.A., M.A., Ph.D., West Virginia University (1970); leave of absence, 1979-80

Hubert M. Custer, *Associate Professor of Physics, Department Chairman*
B.S., Carnegie-Mellon University; M.S., Franklin and Marshall College (1953-61, 1963)

Uldis Daiga, *Associate Professor of Modern Languages*
B.S., University of North Carolina; M.A., Temple University (1965)

Paul M. Dennis, *Associate Professor of Psychology, Acting Department Chairman, Fall 1979*
B.A., Bowdoin College; M.A., Ph.D., New School for Social Research (1968)

James L. Dively, *Associate Professor of Biology*
B.S., M.S., Ph.D., Pennsylvania State University
(1973)

Robert D. Dolan, *Associate Professor of Mathematics, Clinical Professor in Mathematics*
B.S., California State College; M.A., West Virginia University (1964)

Darrell R. Douglas, *Associate Professor of Music*
B.S., University of Minnesota; M.A., Arizona State University; D.M.A., University of Southern California (1972)

Russell E. Eisenbise, *Associate Professor of Sociology*
B.S., McPherson College; M.A., Temple University (1962)

Delbert W. Ellsworth, *Associate Professor of Psychology*
A.B., University of California; M.A., San Francisco State College; Ph.D., University of California (1970)

Martha A. Eppley, *Associate Professor of Economics, Associate Dean of the Faculty*
B.S., Elizabethtown College; M.B.A., Indiana University (1964)

Hugh G. Evans, Jr., *Associate Professor of Economics*
B.S., Juniata College; M.A., Pennsylvania State University (1968)

Boyd Fox, *Associate Professor of Education*
B.S., M.S., Ed.D., Utah State University (1970)

E. Margaret Gabel, *Assistant to the Director of the Library and Head Cataloguer*
B.S., Kutztown State College; M.S.L.S., Syracuse University (1966)

George A. Gliptis, *Associate Professor of Business*
B.S., J.D., University of Virginia (1970)

Suzanne Schmidt Goodling, *Associate Professor of Modern Languages, Department Chairperson*
B.A., Gettysburg College; M.A., Middlebury College (1964)

John F. Harrison, *Associate Professor of Music*
B.M., M.M., Florida State University; Ph.D., Bryn Mawr College (1967)

Frederic E. Hoffman, *Associate Professor of Biology and Clinical Professor in Science*
B.A., M.S., Ph.D., Syracuse University (1969)

Rene C. Hope, *Associate Professor of Physics*
B.S., Ph.D., Brigham Young University (1972)

William J. Jenkins, *Associate Professor of Psychology*
B.S., M.Ed., D.Ed., Pennsylvania State University (1969)

Otis D. Kitchen, *Associate Professor of Music*
B.S., Bridgewater College; M.M., Northwestern University (1965)

John E. Koontz, Jr., *Associate Professor of Mathematics*
B.S., Juniata College; M.A., Bowling Green State University (1966)

Donald B. Kraybill, *Associate Professor of Sociology, Department Chairman*
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Carroll H. Kreider, *Associate Professor of Business and Clinical Professor of Business Education*
B.S., Elizabethtown College; M.Ed., Pennsylvania State University (1969)

Robert E. Lamontagne, *Associate Professor of Political Science*
A.B., St. Anselm's College; A.M., University of Pennsylvania; Ph.D., University of Maryland (1967)

Ronald L. Laughlin, *Associate Professor of Biology*
B.A., Wabash College; M.S., Ohio State University (1968)

R. Bruce Lehr, *Associate Professor of Sociology*
A.B., Bucknell University; M.A., Mexico City College (1961)

J. Henry Long, *Associate Professor of Sociology, Associate Dean of Continuing Education*
B.S., Elizabethtown College; M.A., Temple University; B.D., D.D., Bethany Theological Seminary (1969)

Robert K. Morse, *Associate Professor of Mathematics*
B.S., Franklin and Marshall College; M.A., Temple University (1968)

Stanley R. Neyer, *Associate Professor of Business, Associate Department Chairman*
B.S., Elizabethtown College; M.B.A., Shippensburg State College; C.P.A. (1964)

D. Kenneth Ober, *Associate Professor of Physical Education, Department Chairman*
B.S., M.S., West Chester State College (1964)

H. Marshall Pomroy, *Associate Professor of Business*
B.S., Elizabethtown College; M.Adm., Pennsylvania State University; C.P.A. (1964)

Sharon H. Raffield, *Associate Professor of Social Work*

A.B., Wheaton College; M.S.W., Washington University (1972); sabbatical leave, 1979-80

Raymond R. Reeder, *Associate Professor of Chemistry*

B.S., Case Western Reserve University; Ph.D., Brown University (1969)

Jobie E. Riley, *Associate Professor of Communication Arts*

B.A., Manchester College; M.Div., Bethany Theological Seminary; M.A., Northwestern University; Ph.D., Temple University (1961)

Elisabeth D. Shaw Russell, *Associate Professor of English*

B.A., M.A., Oxford University (1969)

Wayne A. Selcher, *Associate Professor of Political Science, Department Chairman*

A.B., Lebanon Valley College; M.A., Ph.D., University of Florida (1969)

Harry L. Simmers, *Associate Professor of Music, Department Chairman*

B.S., Bridgewater College; M.M., American Conservatory of Music (1966)

Donald E. Smith, *Associate Professor of Communication Arts, Department Chairman*

B.S., M.S., State University College at Geneseo (1969)

John W. Stites, *Associate Professor of Music*

B.S., Manchester College; M.M., Wayne State University (1968)

Glenn H. Thompson, Jr., *Associate Professor of Earth Science*

B.S., Indiana University of Pennsylvania; M.Ed., Pennsylvania State University (1969)

Edward R. Van Vliet, *Associate Professor of Modern Languages and Linguistics, Clinical Professor in Modern Languages*

B.A., Bowdoin College; M.A., Ph.D., Brown University (1971)

Bela Vassady, Jr., *Associate Professor of History*

B.S., Pennsylvania State University; M.A., Ph.D., Temple University (1971)

Thomas R. Winpenny, *Associate Professor of History*

B.A., M.A., Pennsylvania State University; Ph.D., University of Delaware (1968)

Michael A. Worman, *Associate Professor of Political Science*

B.A., Grove City College; M.A., Ph.D., Florida State University (1970); leave of absence, 1979-80

Assistant Professors

David A. Barger, *Assistant Professor of Music*

B.M., Michigan State University; M.M., Florida State University; R.M.T. (1978)

Edward R. Bleau, *Assistant Professor of Economics*

B.S., North Adams State College; M.A., University of Illinois (1972)

Virginia K. Christopher, *Readers' Service Librarian*

A.B., Washington University; M.L.S., Pratt Institute (1969)

Lee E. Evinger, *Assistant Professor of Earth Science*

B.S., Dickinson College; M.A., Indiana University (1970)

Robert G. Garrett, *Assistant Professor of Health and Physical Education*

B.S., East Stroudsburg State College; Ed.M., Temple University (1967)

Donna E. Gaver, *Assistant Professor of Education*

B.S., Tufts University; M.Ed., Ed.D., University of Virginia (1978)

Doris Gordon, *Assistant Professor of Occupational Therapy, Department Chairperson*

B.S., M.S., University of Pennsylvania; O.T.R. (1972)

David Iacono-Harris, *Assistant Professor of Social Work, Program Director*

B.A., St. Francis College; M.S., University of Wisconsin; Ph.D., University of Tennessee (1978)

Yvonne E. Kauffman, *Assistant Professor of Physical Education*

B.S., Bridgewater College; M.Ed., West Chester State College (1966)

Donald G. Muston, *Assistant Professor of Business*

B.S., M.B.A., Indiana University; B.I.M., American Graduate School of International Management (1977)

Frank P. Polanowski, *Assistant Professor of Biology*

B.S., Wilkes College; M.Ed., Ph.D., Pennsylvania State University (1977)

H. Herbert Poole, Jr., *Assistant Professor of History*

B.A., Franklin and Marshall College; M.A., University of Pennsylvania (1969)

Carmine T. Sarracino, *Assistant Professor of English*

B.A., Rhode Island College; M.A., Ph.D., University of Michigan (1973)

Charles D. Schaeffer, Jr., *Assistant Professor of Chemistry*

B.A., Franklin and Marshall College; Ph.D., State University of New York at Albany (1976)

Jack P. Sederholm, *Assistant Professor of Communication Arts*

B.A., M.A., Brigham Young University; Ph.D., Wayne State University (1972)

Donald P. Smith, *Assistant Professor of Physical Education*

B.S., University of Mississippi (1972)

Randolph L. Trostle, *Assistant Professor of Business*

B.S., Elizabethtown College; M.Ed., M.B.A., Shippensburg State College (1972)

Joseph A. Whitmore, *Assistant Professor of Physical Education*

B.A., Bridgewater College (1968)

Guido R. Zanni, Jr., *Assistant Professor of Psychology, Department Chairman*

B.A., Providence College; M.A., Ph.D., New School for Social Research (1975); leave of absence, fall, 1979-80

Instructors

Abby H. Abidness, *Instructor in Occupational Therapy*

B.S., Indiana University Medical Center; M.S., Boston University; O.T.R. (1976)

Stephen C. Behrendt, *Instructor in English*

B.A., University of Wisconsin; M.A., Eastern Kentucky University; Ph.D., University of Wisconsin (1977)

J. Sue Dolan, *Instructor in Business and Clinical Professor of Business Education*

B.S., Elizabethtown College; M.Ed., Shippensburg State College (1974)

Jean F. Hiler, *Instructor in Occupational Therapy*

B.S., State University of New York College at Oswego; O.T.R. (1974)

Reba M. Sebelist, *Instructor in Occupational Therapy*

B.S., Elizabethtown College; M.S., University of Pennsylvania (1977)

William Leigh Taylor, Jr., *Instructor in English*

B.A., University of the South; M.A., Ph.D., University of Virginia (1977)

Barbara C. Tulley, *Instructor in Computing, Coordinator of Academic Computing Services*

B.S., St. Bonaventure University; M.S., Worcester Polytechnic Institute (1974)

Steven A. Anolik, *Visiting Lecturer in Psychology, 1979-80*

B.A., University of Connecticut; M.A., Queens College of City College of New York; Ph.D., Ohio State University

ADJUNCT FACULTY

Medical Technology

Susanta Bhattacharje at Harrisburg Hospital, Harrisburg

M.D., University of Birmingham

Margaret Black at Harrisburg Polyclinic Hospital, Harrisburg

B.S., Lebanon Valley College; M.T. (ASCP)

John W. Eiman at Abington Memorial Hospital, Abington

M.D., University of Pennsylvania School of Medicine

Janice Fogleman at Harrisburg Hospital, Harrisburg

B.S., Elizabethtown College; M.T. (ASCP)

Nadine Gladfelter at Lancaster General Hospital, Lancaster

M.S., Temple University, M.T. (ASCP)

Brenda Kile at York Hospital, York

B.S., Lycoming College; M.T. (ASCP)

William V. McDonnell at West Jersey Hospital, Voorhees, NJ

M.D., Jefferson Medical College

Ward M. O'Donnell at Lancaster General Hospital, Lancaster

M.D., Georgetown Medical School

Julian W. Potak at Harrisburg Polyclinic Hospital, Harrisburg

D.O. at Philadelphia College of Osteopathic Medicine

Barbara Scheelje at Abington Hospital, Abington

B.S., Colby-Sawyer College; M.T. (ASCP)

William Umiker at St. Joseph Hospital, Lancaster

M.D., State University of New York at Buffalo

Margaret Warwick at West Jersey Hospital, Voorhees, NJ

M.S., Jefferson Medical College; M.T. (ASCP)

Susan White at St. Joseph Hospital, Lancaster

B.S., Elizabethtown College; M.T. (ASCP)

John P. Whiteley at York Hospital, York

M.D., Temple University School of Medicine

Occupational Therapy

Margaret E. Alexander at Harrisburg Community Mental Health Center, Harrisburg
Certificate in Occupational Therapy, University of Pennsylvania; O.T.R.

Phyllis E. Breuninger at Coatesville Veterans Administration Hospital, Coatesville
Certificate in Occupational Therapy, University of Pennsylvania; O.T.R.

Barbara Brookhouse at Muhlenberg Medical Center, Plainfield, NJ
B.S., Wayne State; O.T.R.

Marion Butler at Williamsport Hospital Rehabilitation Center, Williamsport
B.S., Ohio State University; O.T.R.

Tom Ciucci at Geisinger Medical Center, Danville
B.S., Virginia Commonwealth University; O.T.R.

Marianne Dahl at Moss Rehabilitation Center, Philadelphia
B.S., Temple University; O.T.R.

Joanne M. Dileo at Good Shepherd Home, Allentown
B.S., Temple University; O.T.R.

Glenda J. Dougherty at St. Joseph's Hospital, Lancaster
B.S., Virginia Commonwealth University; O.T.R.

Michael D. Goodling at Harrisburg Polyclinic Hospital, Harrisburg
B.S., University of Illinois; O.T.R.

Christine L. Hischmann at Tunkhannock Counseling Center, Tunkhannock
B.S. Temple University; O.T.R.

Jill Hochstuhl at Garden State Rehabilitation Center, Toms River, NJ
B.S., Medical College of Virginia and Virginia Commonwealth University; O.T.R.

Margaret Howison at Elizabethtown Center for Children and Youth, Elizabethtown
B.S., Virginia Commonwealth University; O.T.R.

JoAnn Hubbs at The Sheppard and Enoch Pratt Hospital, Towson, MD
B.S., University of Wisconsin at Madison; O.T.R.

Mohan Kalkrni at Allied Services for the Handicapped, Scranton
B.S., Kern Hospital, Bombay, India; O.T.R.

Shirley A. Kreiser at Veterans Administration Hospital, Lebanon
B.S., M.A., Columbia University; O.T.R.

Donna Lucke at The Sheppard and Enoch Pratt Hospital, Towson, MD
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M.S., University of Pennsylvania; O.T.R.

Nat Martin at Colonial Manor Nursing Home, York
M.S., Virginia Commonwealth University; O.T.R.

Donald L. Maud at Veterans Administration Hospital, Lebanon
B.S., Ohio State University; O.T.R.

William McPhaden at Abington Memorial Hospital, Abington
B.S., State University of New York at Buffalo; O.T.R.

Jan Minor at Rockford Center, Willmington, DE
B.S., Elizabethtown College; O.T.R.

Ramona Monaco at Westmoreland Hospital Community Mental Health Center, Greensburg
M.S., University of Pittsburgh; O.T.R.

Bernice B. Moss at Veterans Administration Hospital, Philadelphia
B.S., University of Pennsylvania; O.T.R.

Bonnie Moy at Fort Howard Veterans Administration Hospital, Fort Howard, MD
B.S., San Jose University, M.S., Johns Hopkins; O.T.R.

Joyce A. Perella at the Reading Easter Seal Society, Reading
B.S., Virginia Commonwealth University; O.T.R.

Nita Popat at Reading Institute of Rehabilitation, Reading
B.S.C., Bombay University, India; O.T.R.

Linda Pratt at Harrisburg State Hospital, Harrisburg
B.S., University of New Hampshire; O.T.R.

Gail A. Richert at Option-Day Treatment Center, Lancaster
B.S., University of Pennsylvania; O.T.R., M.S. Ed., Temple University

Sharon Sanduski at Intercommunity Action, Philadelphia
B.S., Tufts University; O.T.R.

Margaret Schulz at New Jersey Rehabilitation Hospital, East Orange, NJ
B.S., Columbia University; O.T.R.

Dhun G. Sharma at Temple University Hospital, Philadelphia
B.S., New York University; O.T.R.

Barbara A. Smith at Harmarville Rehabilitation Center, Pittsburgh
B.S., Ohio State University; O.T.R.

Elinor Anne Spencer at Eastern Maine Medical Center, Bangor, ME
B.A., University of Pennsylvania; O.T.R.

- Mary Teeter** at Reading Hospital, Reading
B.S., University of New Hampshire; O.T.R.
- Jan Watson** at Essex County Hospital Center, Cedar Grove, NJ
B.S., M.S., Wayne State University; O.T.R.
- Ernestine R. Whiting** at Veterans Administration Hospital, Coatesville
B.S., Cornell University; O.T.R.
- Wilma J. Wiener** at Norristown State Hospital, Norristown
B.A., University of Pennsylvania; O.T.R.

Social Work

- Kathryn Hackman** at Brethren Village, Neffsville
M.S.W., University of Pennsylvania
- Gerald Kaufman** at Hershey Psychiatric Associates and Norlanco Family Health Center, Hershey and Elizabethtown
M.A., Indiana University
- Walter Kisthardt** at Masonic Homes Social Services, Elizabethtown
B.A., Elizabethtown College
- Barbara Martin** at Hershey Medical Center, Pennsylvania State University, Hershey
M.S.W., State University of New York, Buffalo
- Sam McClea** at House Judiciary Committee, Harrisburg
M.S.S.W., University of Pennsylvania
- Albert Molitor** at Pennsylvania Department of Health, Harrisburg
M.S.S.W., University of Pennsylvania
- Eileen O'Neal** at Dauphin County Services for Children and Youth, Harrisburg
M.S.W., University of Pittsburgh
- Fiona Patterson** at Polyclinic Hospital, Harrisburg
M.S.W., University of Pennsylvania
- Hubert Peterson** at Social Service Department, Harrisburg Hospital, Harrisburg
M.S.W., University of Illinois
- Gary Shuey** at Cumberland County Children's Services, Carlisle
M.S.W., Marywood College
- Diane Weidman**, at Social Services Department, Hershey Medical Center, Pennsylvania State University, Hershey
M.S.W., Virginia Commonwealth University
- Cheryl Weikel** at Family and Children's Service of Harrisburg, Harrisburg
M.S.S.W., University of Pittsburgh

THE ADMINISTRATION

Office of the President

Mark C. Ebersole, Ph.D., LL.D.,
President

Martha A. Farver,
Director of Personnel

J. Gerald Greiner, M.Div.,
Chaplain of the College

Academic Affairs

Bruce L. Wilson, Ph.D.,
Dean of the Faculty

Martha A. Eppley, M.B.A.,
Associate Dean of the Faculty

J. Henry Long, M.A., B.D., D.D.,
Associate Dean for Continuing Education

A. F. Kish, M.S.,
Program Director, Continuing Education

Donald L. Neiser, B.S.,
Registrar and Director of Summer Sessions

Susan B. Przywitowski, B.S.,
Assistant to the Registrar

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Director of the Library

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Head Cataloguer

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Reader's Service Librarian

Kevin J. Manning, M.S.,
Director of Admissions

Jane Morton, B.S.,
Admissions Counselor

John T. Offermann, M.A.,
Admissions Counselor

Sandra L. Zerby, M.Ed.,
Assistant Director of Admissions

Stanley K. Bowers, M.Ed.,
Coordinator of Instructional Services

Howard A. Kroesen, B.S.,
Director of Administrative Computer Services and Operations

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Gerald H. Risser, B.S., C.P.A.,
Treasurer

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Director of Food Services

Robin L. Carvutto, B.S.,
Manager of Bookstore

Martha A. Farver,
Office Manager

Hugh W. Harris, B.S.,
Director of Public Safety

Harry M. Page, B.A.,
Superintendent of Buildings and Grounds

Wilbur E. Weaver, Ed.M.,
Manager of Post Office

Student Affairs

Walter B. Shaw, Ph.D.,
Dean of Student Affairs and Director of Student Activities

Gordon McK. Bateman, M.S.,
Director of Financial Aid

James R. Hilton, Sr., M.S.,
Director of Career Development Center

Brenda F. Peters, B.S.,
Director of Health Care

Beverly V. Piscitelli, M.S.,
Counselor

Royal E. Snavelly, M.A.,
Counselor

Jerry E. Davis, B.S.,
Area Coordinator, Center Community

Gerald W. Peterson, B.A.,
Area Coordinator, Founders Community

John M. Tulley, M.Ed.,
Director of Athletics

Public Affairs

James L. M. Yeingst, M.A.,
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Kenneth A. Baylor, B.A.,
Director of Public Information

Polly C. Ehrgood, A.B.,
Director of Alumni Relations

Development

Linda Williams-Langsett, J.D.,
Director of Development

Lynne Perry,
Director of Annual Fund

Robert S. Young,
Development Staff Officer

**ADMINISTRATIVE STAFF AND
PARAPROFESSIONAL PERSONNEL**

Jay J. Burkins, Jr.,
Heating, Air Conditioning, and Ventilating Technician

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Administrative Assistant in Department of Education

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Associate Director of Data Processing Services

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Chief Accountant

Lauretta D. Hynicker, R.N.,
Hostess, Cameron Estate

Donna R. Kautz,
Computer Operator

Alice L. Knouse, B.S.,
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Mildred F. Long,
Administrative Staff in Departments of Sociology and Political Science

Patricia A. March,
Assistant to Director of Housing

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Grayce E. Mengel,
Secretary to the President

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Library Assistant in Charge of Circulation

Roberta J. Musser, R.N., B.S.,
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Carol T. Padgett, M.A.,
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Yvonne M. Schwanger,
Manager, Food Services

Patricia G. Stepanchak, R.N., B.S.,
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Carol H. Warfel, M.A.,
Library Assistant

BOARD OF TRUSTEES 1979

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Lancaster, Pennsylvania

Area Loan Manager, Equitable Life Assurance Society of the United States

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Biglerville, Pennsylvania

Executive Director, Adams County Community Action Agency

Carlos R. Leffler, *Secretary* (1981)

Richland, Pennsylvania

President, Leffler, Inc.

Earl K. Ziegler, *Assistant Secretary* (1980)

Quarryville, Pennsylvania

Pastor, Mechanic Grove Church of the Brethren

John F. Chubb (1980)

Middletown, Pennsylvania

Partner, Kreps & Chubb

Elmer Q. Gleim (1980)

York, Pennsylvania

Teacher, William Penn Senior High School

Carl E. Herr (1981)

Hummelstown, Pennsylvania

Planning Division for Vocational Education,
Department of Education, Commonwealth
of Pennsylvania

Robert O. Hess (1979)

Manheim, Pennsylvania

Owner, Robert O. Hess Agency

S. Dale High (1981)

Lancaster, Pennsylvania

Executive Vice President, High Steel Structures,
Inc.

Norman E. Keller (1979)

Lebanon, Pennsylvania

President, Keller Bros. Motor Co.

Lois H. Kerkeslager (1981)

Chatham, New Jersey

District Manager, New York Telephone Company

J. Paul Lyet (1979)

Bronxville, New York

Chief Executive Officer and Chairman, Sperry
Rand Corporation

Richard E. McElrath (1980)

Glen Rock, New Jersey

Treasurer and Executive Officer, Teachers Insurance and Annuity Association/College Retirement Equities Fund

J. Harold Merkey (1981)

Manheim, Pennsylvania

Owner, J. Harold Merkey, Inc.

George L. Morrison, Jr. (1980)

Harrisburg, Pennsylvania

Chairman Emeritus, Commonwealth National
Bank

Benjamin G. Musser (1980)

Wormleysburg, Pennsylvania

Physician and Surgeon

Romaine S. Myers (1981)

East Berlin, Pennsylvania

Vice-Chairman, District Board, *Secretary*, District
Ministry Commission, Church of the Brethren

Wayne A. Nicarry (1979)

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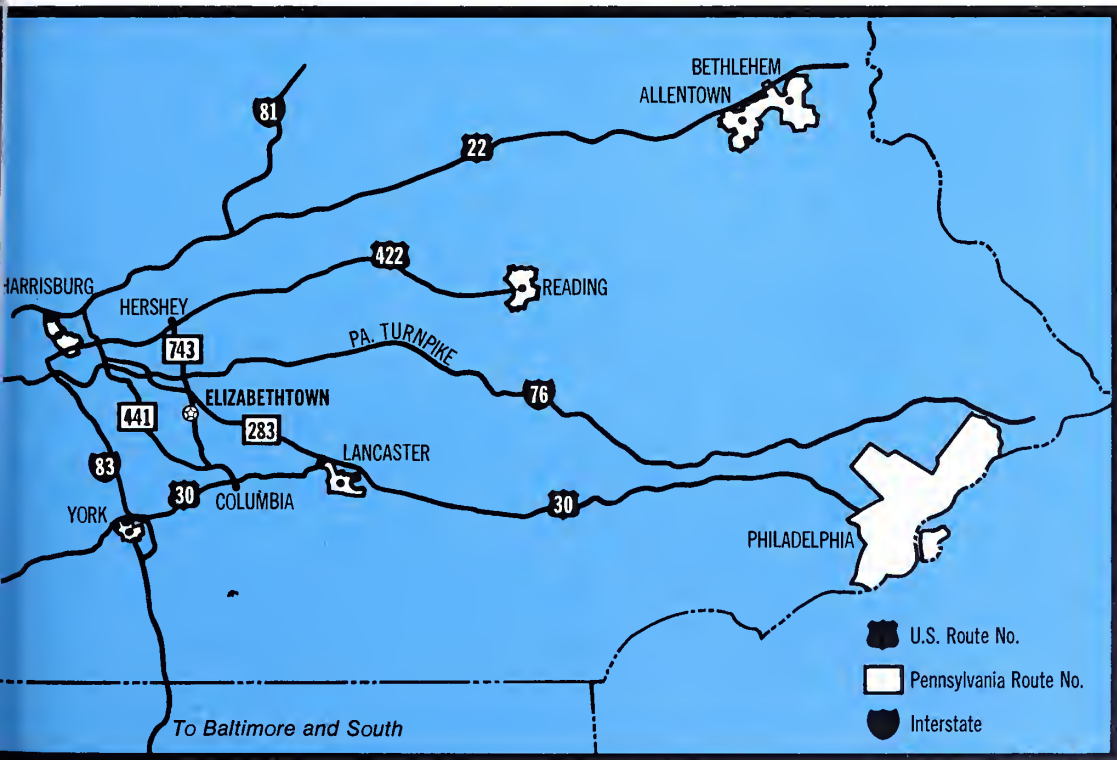
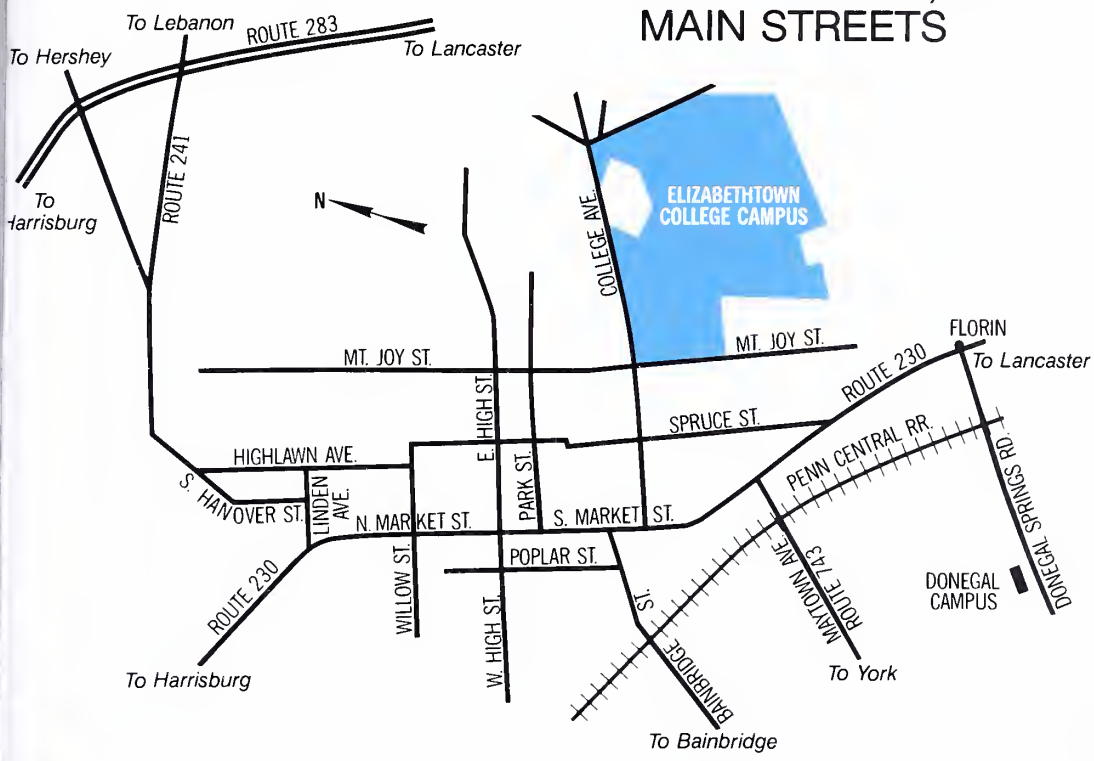
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ELIZABETHTOWN, PA. MAIN STREETS



Elizabethtown College

ELIZABETHTOWN, PENNSYLVANIA 17022
(717) 367-1151

Elizabethtown College



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Catalog
1981-83

Correspondence Directory

Elizabethtown College
Elizabethtown, Pennsylvania 17022
717/367-1151

<i>Office</i>	<i>Building</i>	<i>Telephone Extension</i>
Office of Admissions Sandra L. Zerby, <i>Acting Director</i>	Alpha Hall	161
Office of the Assistant to the President William L. Taylor, <i>Assistant to the President</i>	Alpha Hall	186
Office of Athletics D. Kenneth Ober, <i>Director</i>	Thompson Gymnasium	137
Office of Business Affairs	Alpha Hall	218
Office of the Director of Conferences Lauretta Hynicker, <i>Director</i>	Alpha Hall	246
Office of Continuing Education J. Henry Long, <i>Associate Dean</i>	Nicarry Hall	291
Office of the Dean of Faculty Bruce L. Wilson, <i>Dean</i>	Alpha Hall	187
Office of the President Mark C. Ebersole, <i>President</i>	Alpha Hall	193
Office of the Registrar Donald L. Neiser, <i>Registrar</i>	Alpha Hall	211
Office of the Dean of Student Affairs Walter B. Shaw, <i>Dean</i>	Baughner Student Center	196
Office of the Treasurer Thomas J. Kingston, <i>Treasurer</i>	Alpha Hall	181

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Students are to be governed by the policies and provisions contained in this catalog, subject to the right of the trustees, administration, and faculty to repeal, change, or amend them at any time.

Elizabethtown College is in compliance with the requirements of Title VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and all other applicable, federal, state, and local statutes, ordinances, and regulations. Elizabethtown does not engage in illegal discrimination against students, prospective students, employees, or prospective employees on the basis of race, color, religion, ethnic or national origin, personal handicap, age, or sex.

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Calendar 1981-82

FALL SEMESTER

Aug. 27-31	Faculty Meetings and Orientation
Aug. 29	Freshmen Arrive
Aug. 31	Upperclassmen Arrive
Aug. 31	Registration
Aug. 31	Evening classes begin 6:00 p.m.
Sept. 1	Day classes begin 8:00 a.m.
Sept. 1	President's Convocation
Sept. 5	Saturday classes meet
Sept. 7	Labor Day—No day or evening classes
Oct. 8	Friday schedule of day classes
Oct. 8	Thursday evening classes meet
Oct. 9	Reading Day
Oct. 10	Saturday classes meet
Oct. 13	Midterm
Oct. 17	Homecoming
Nov. 25	Thanksgiving Recess begins 5:00 p.m.
Nov. 30	Classes resume 8:00 a.m.
Dec. 8	Thursday schedule of day classes
Dec. 8	Tuesday evening classes meet
Dec. 9	Monday schedule of day classes
Dec. 9	Wednesday classes meet
Dec. 11	Classes end 5:00 p.m.
Dec. 12	Reading Day
Dec. 12	Saturday classes meet
Dec. 14-19	Final Exams

SPRING SEMESTER

Jan. 15-18	Faculty Meetings and In-Service Programs
Jan. 18	Registration
Jan. 19	Day classes begin 8:00 a.m.
Jan. 19	Evening classes begin 6:00 p.m.
Feb. 26	Reading Day
Feb. 27	Saturday classes meet
Mar. 3	Midterm
Apr. 6	Easter Recess begins 5:00 p.m.
Apr. 14	Classes resume 8:00 a.m.
May 4	Friday schedule of day classes
May 4	Tuesday evening classes meet
May 4	Classes end 10:00 p.m.
May 4	Classes end 5:00 p.m.
May 5	Reading Day
May 6-12	Final Exams
May 15	Commencement

SUMMER SESSIONS

May 17-June 18	Summer Session I
June 21-July 23	Summer Session II

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Calendar 1982-83

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Aug. 28	Freshmen Arrive
Aug. 30	Upperclassmen Arrive
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Aug. 30	Registration
Aug. 31	Day classes begin 8:00 a.m.
Aug. 31	President's Convocation
Sept. 4	Saturday classes meet
Sept. 6	Labor Day—No day or evening classes
Oct. 7	Friday schedule of day classes
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Oct. 23	Homecoming
Nov. 24	Thanksgiving Recess begins 5:00 p.m.
Nov. 29	Classes resume 8:00 a.m.
Dec. 7	Thursday schedule of day classes
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Dec. 8	Wednesday evening classes meet
Dec. 10	Classes end 5:00 p.m.
Dec. 11	Reading Day
Dec. 11	Saturday classes meet
Dec. 13-18	Final Exams

SPRING SEMESTER

Jan. 13-17	Faculty Meetings and In-Service Programs
Jan. 17	Registration
Jan. 18	Day classes begin 8:00 a.m.
Jan. 18	Evening classes begin 6:00 p.m.
Feb. 25	Reading Day
Feb. 26	Saturday classes meet
Mar. 2	Midterm
Mar. 29	Easter Recess begins 5:00 p.m.
Apr. 6	Classes resume 8:00 a.m.
May 3	Friday schedule of day classes
May 3	Tuesday evening classes meet
May 3	Classes end 10:00 p.m.
May 3	Classes end 5:00 p.m.
May 4	Reading Day
May 5-11	Final Exams
May 14	Commencement

SUMMER SESSIONS

May 16-June 17	Summer Session I
June 20-July 22	Summer Session II

AUGUST

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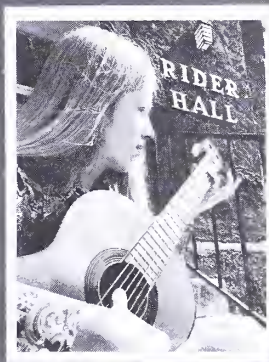
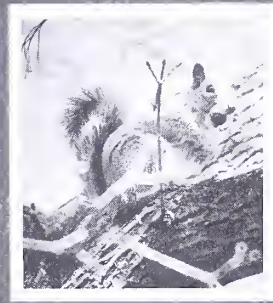
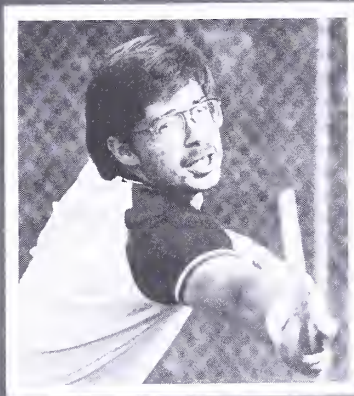
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Statement of Purpose

The purpose of Elizabethtown College has historically been expressed in the phrase, "Educate for service." The College provides an education which should enable the student to develop as an intelligent and moral citizen who can be a productive member of society. The College affirms a relationship between those academic disciplines which primarily prepare students with the mental skills and specialized knowledge to undertake successful personal careers in business, industry, and the professions; and those disciplines which primarily foster the knowledge of cultural heritage, the ability to communicate effectively, the capacity for long-term and continuous self-education for reflective moral and spiritual powers of mind, and for a deep sense of personal integrity. Ideally, Elizabethtown College graduates should be able to serve themselves and others freely and responsibly in an environment characterized by social, cultural, ethical, spiritual, and physical uncertainties. The College seeks to foster that balanced pragmatic mixture of professional and humanistic studies that has historically characterized liberally educated men and women.

The achievement of ideal balance of curricular studies for undergraduate students depends upon diversity of intellectual enquiry and outlook by both teachers and students within the disciplines represented in its curriculum, and upon variety of responsible expression of scholarly opinion. The College welcomes a mixture of students of varied ages, backgrounds, traditions, interests and needs, as these can be accommodated within the existing curriculum. It commits itself to fostering excellence in educational achievement and to strengthening intellectual curiosity.

an overview of Elizabethtown College





a place to live, to learn, to launch a career

Clearly, it is important that as a prospective student you should become aware of the academic policies and regulations of the College, along with the curricula and course descriptions, the costs and admissions policies, and all the other facts that this catalog contains.

However, it is equally important that you begin to think about the *place* that is Elizabethtown College. Any place in which for over 80 years men and women have gathered to live and to study in community must have its own special atmosphere. Certainly Elizabethtown does. Broadly, this atmosphere arises from the excellence and the human concern of its professors, the quality of the students and of the life they share, the learning which is nourished here, and the lives and careers which that learning in turn begets.

However, a still more particular description of the College seems in order, and the "overview" which follows is an attempt to describe to you this place in which so many students have lived, learned, and launched their careers.

A PLACE TO LIVE

In 1899 students and faculty first joined together to form the academic community that is Elizabethtown College. Since that time they have committed themselves to an educational philosophy which asserts the union of all aspects of college life. Life outside the classroom—both for students and faculty—should be as challenging and rewarding as the studying that goes on within. For both of these aspects of college life comprise *learning*, that journey of self-discovery and self-realization which leads a man to know himself as completely as he can—in his relations with himself, his fellow men, his god.

To begin to know yourself completely you must have as complete an experience of living as you can. This experience is extremely important if, like most entering freshmen, you look forward to college as your first chance to stand on your own, to look critically about you, to make informed decisions and individual com-

mitments. In exploring this independence you will want a college that offers you every opportunity to find your own way—and kind—of life. Elizabethtown offers you this opportunity.

A pleasant environment

The grounds of the College are quietly conducive to life in and out of the classroom. If there are formal aspects of the college landscape—terraced playing fields, wide lawns, a lovely dell which rises to groves of trees among which sit many of the College's academic buildings, there are also places where one can quietly wander alone—in the woods and thickets which are reclaiming the old quarry on the grounds, beside the small pond where students often read, fish, and doze in the warmer months (and skate in the winter), or out into the countryside which surrounds the town.

For the countryside is beautiful. To the east, Lancaster County is a region of well-kept and remarkably fertile farmland, while nearby to the west of the College rise the Appalachian mountains, where students often hike in the spring and autumn, and ski in the winter. The Borough of Elizabethtown itself is very small—some 8,000 people—and, naturally, offers many points of contrast, pro and con, to larger cities. Fortunately however, you do not have to choose. On the one hand you can enjoy the attractive qualities of life in a small town—a fairly relaxed pace of life, a quietly cordial atmosphere, the ready accessibility of all areas of town to the College ("downtown" is an easy walk of several blocks). On the other hand, Hershey, a resort and recreational center popular with students, is just 15 minutes from campus, and the cities of Lancaster, Harrisburg, and York are all 30 minutes away.

Within this area cultural resources are ample, if naturally less varied and rich than a big city might afford. The College supports a good calendar of cultural events—concerts, recitals, lectures, movie series. Harrisburg and Hershey each support symphony orchestras, and in the summer there is a very fine music and drama festival in Mount Gretna, a few miles to the north. Lancaster is quite properly proud of its Fulton Opera House, a richly restored 19th-



century theater which offers a wide array of cultural events in dance, drama, and music. Further afield, Philadelphia and Baltimore are within an hour and a half of the campus, New York and Washington within three. In short, you are by no means isolated at Elizabethtown.

A chance to express yourself

Elizabethtown not only offers you the chance to enjoy cultural offerings both on and off the campus, it also gives you ample opportunity to discover, explore, and develop your own interests and abilities. You can involve yourself in a wide variety of activities, from acting in plays to writing them, from playing music to playing chess, in scuba diving, spelunking, fencing, and photography, and in many other student organizations in which your interests and talents can have full rein.

Many organizations and groups speak to more serious interests. You can join an organization that reinforces your academic program—like the Accounting Club, the Supreme Fiction Society, the local chapter of the American Chemical Society. A number of religious groups offer fellowship and worship in exploring corporate and individual spiritual concerns. In other organizations students give their time and energies in volunteer community service.

Name your interest, and in all probability there is a student organization that reflects it. If not, and if you can find enough like-minded students, the College encourages you to start a new group.

Another very important part of student life at Elizabethtown is the athletic program. The College is well equipped to serve most physical fitness programs. Students and faculty frequently use the gymnasium and the student center—swimming, bowling, jogging, playing tennis or handball or racquetball, working out in the weightroom, and so on. Whether you want to spend part of an afternoon shooting basketball with a few friends or follow your own schedule of physical conditioning, the College encourages you, firmly believing in the old maxim, *mens sana in corpore sano*—a healthy mind in a healthy body.

In addition to individual sports programs, the College fields men's varsity teams in baseball, basketball, soccer, tennis, and wrestling; women's varsity teams in basketball, field hockey, softball, tennis, and volleyball; and coed varsity track and swimming teams. The College's intramural leagues—for men, women, and coed—give you a chance to compete against teams from other residence halls,

from other clubs, and from the faculty in flag football, soccer, volleyball, basketball, bowling, softball, paddleball, and tennis.

Helping and being helped

Volunteer work in the community is an important part of college life for many students. They help in a wide range of community services, from working in hospitals to fighting community fires with the volunteer fire company, from tutoring children with reading disabilities to assisting in local churches. This concern is one sure sign that students think of the Borough of Elizabethtown as *their* community, and want to make a personal commitment to it.

In turn, should you need help, the College stands ready to assist you. Your faculty adviser or, indeed, any member of the faculty can offer you academic counseling, from helping you plan your program of study to suggesting tutoring or remedial work, or advanced study. Should you decide to go on to graduate or professional school, members of the faculty will help you in the important process of graduate school selection and admissions.

If you have personal concerns, the Center for Counseling and Student Development is an excellent source of help. Another is the College chaplain, a minister of the Church of the Brethren who also offers spiritual counsel. If you would feel more at home with a member of your own faith, the chaplain will put you in touch with a local minister, priest, or rabbi.

For routine medical problems, the College maintains the College Health Center with a 24-hour nursing staff. A modern health center with X-ray and laboratory facilities is five minutes from campus, and in case of emergency or serious illness the Hershey Medical Center (the hospital and medical school of The Pennsylvania State University) is only 15 minutes away.

Full citizenship in the college community

As a member of the college community, you will enjoy more independence than you have probably ever had before. Not only will you be making important decisions about the direction of your own life, you will also share responsibility for the well-being of the larger academic community. At Elizabethtown students join the faculty and administration in both the privileges and the duties of citizenship in the College.

Most students live on campus in one of the residence communities—groups of two or three residence halls. You can become actively involved in the governance of your residence



community, planning activities for all residents to share, establishing rules that will protect individual rights and make the community a more pleasant place in which to live, and determining disciplinary measures for violations.

In the larger community, the College as a whole, you can be just as actively involved. Students play a major part in planning all-campus events—from the cultural series to rock concerts to benefit dance-a-thons. Instead of having “just another student government association,” the College elects students to the Community Congress, the Residence Hall Council, the Campus Life Council, and other college-wide governance and policy-making committees. In short, at Elizabethtown you will have opportunities to test both your leadership skills and your organizational abilities, and to make your voice heard in deciding policies that will set the future course of the College.

Nor is your status as a full member of the academic community merely a matter of governmental organization. It is also reflected in a college social life in which faculty and students meet to enjoy shared interests. Professors join in student activities—not necessarily as leaders, but simply because they enjoy hiking or painting scenery. You in turn will join in faculty activities—not as a student, but as a friend and guest. Thus the old gulf between student and teacher narrows, bridged by a sense of shared commitment to an academic community in which all members join together to live and to learn.

A PLACE TO LEARN

Learning and living are synonymous—and nowhere is this clearer than in Elizabethtown's classrooms. A college education is an adventure in which you explore the frontiers of the universe, the inner workings of the human brain, the day-to-day lives of people who lived thousands of years ago, the fascinating symmetries (and similarities!) of mathematics and music, rat colonies and human crowds, the structure of the atom and the solar system. It is an education designed to open your mind to limitless possibilities, by giving you:

Individual attention

At Elizabethtown, education is not an assembly-line, mass-produced commodity, but a personal journey in which you seek answers to the needs, abilities, and interests that make you who you are. Just as independence in the





college community accords both privileges and responsibilities, so this kind of individual education encourages your maturity in the classroom. For if an individual education means that professors must know you well so that they can direct their teaching specifically to you, it also means that you must responsibly participate in your own education—for it is your journey.

Elizabethtown strives to provide an individual education by keeping its classes small and informal. The student faculty ratio is 14:1, and many classes are even smaller, especially in your junior and senior years. The College recognizes that learning comprises two fundamental tasks—the absorption of a given body of skills and factual information, and the ability of the mind flexibly and subtly to interpret this information, integrating it with the mind's own experience of itself and of the world. Accordingly, lectures and discussion groups encourage you to probe, analyze, to speak up, challenge others' opinions, and defend your own. Intelligent disagreement, both with fellow students and with the professor, both in class and afterwards, is always encouraged.

An exceptional faculty

Out of class discussions with professors are commonplace at Elizabethtown. The College's instructors have a commitment to helping you on a one-on-one basis, whether challenging you to do incisive independent study, inviting you to help in their own research, or seeing you through a rough spot in a course. Elizabethtown professors' interest in you is personal, and it does not end when the class bell rings—which is one of the reasons they were asked to teach at the College.

Of course, the faculty also possesses the recognized professional qualifications; most of them hold the highest earned degree in their fields, and many are doing research that will lead to the publication of books and scholarly articles. However, the College insists on going beyond formal credentials to find professors who can excite you about their subjects, who will value your contributions to the class as greatly as you value theirs, who can challenge you to become what you would be.

Modern facilities and equipment

Perhaps the point of greatest interest to a prospective student at Elizabethtown is the library. The library holdings comprise 150,000 bound volumes; over 665 periodicals; 4,650 art slides; 5,500 records, 317 tapes, and 2,150 musical

scores; and more than 5,000 microforms. The library features open stacks for research, large reading rooms, small study rooms, and individual study carrels.

The science departments have an impressive array of sophisticated equipment, some of which is usually found only at much larger institutions. Its software systems include all the major computer languages. Elizabethtown is one of the few colleges which offer its students additional systems such as a data management system, and simulation, statistical, and interactive graphics packages.

The College has television and radio studios; art studios and photography darkrooms; music practice rooms, practice instruments, and playback equipment facilities for plays and concerts.

Every academic facility on campus has been either renovated or built since 1957. Each department occupies a separate area or building. Classrooms, laboratories, studios, special library collections, faculty offices, and departmental lounges are grouped conveniently together with plenty of space for both faculty and student needs. Consequently, you and your professor can settle a point quickly because the references are close at hand, or you can set up complex laboratory experiments without worrying that other classes will disturb them.

A curriculum that meets your needs

During your first two years at Elizabethtown, you will concentrate on courses that fulfill the General Education Core requirement, a schedule of courses in literature, modern languages, the fine arts, religion and philosophy, history, social science, mathematics, science, and physical education. The resulting broad general knowledge of many fields is good in itself, for certainly no one can claim to be well-educated without it, and it also gives you a chance to sample a full range of academic disciplines before you decide on your major. If like many freshmen you are still undecided when you enter college, this aspect of the General Education requirement will be of real benefit to you.

When you are ready to concentrate on a major field of study, Elizabethtown gives you the following choices.



Liberal arts majors

Biology	Modern Languages
Chemistry	French
Communication Arts	German
(Broadcasting,	Spanish
Journalism,	Music
Speech,	Physics
Theatre)	Political Science
Economics	Psychology
English	Religion and Philosophy
History	Sociology
Mathematics	

Career-oriented majors:

Business	Allied Health Professions
Accounting	Medical Technology
Business	Music Therapy
Administration	Occupational Therapy
Chemical	Associate degree:
Management	Medical Secre-
Computer Science	tarial Science
Education	Social Work
Early Childhood	
Elementary	
Secondary	
Business	
Music	

Preprofessional programs:

Pre-law	Pre-pharmacy
Pre-medicine	Pre-veterinary medicine
Pre-dentistry	Pre-seminary
Pre-osteopathy	

To supplement and complement your studies, the College offers a variety of non-major courses in:

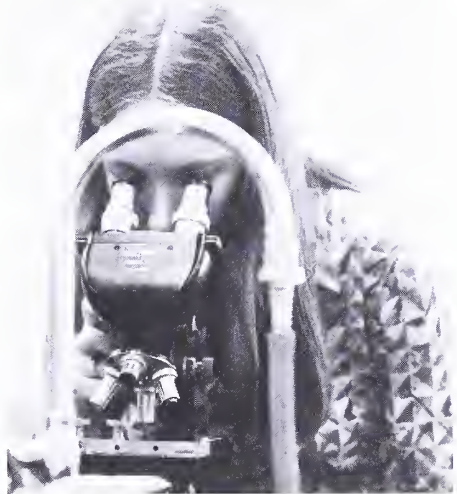
Art	Physical Education
Earth Science	and Health
Geography	

In addition, there are cooperative programs with other colleges and universities in:

Engineering (Three years at Elizabethtown and two years at Pennsylvania State University resulting in two degrees);

Forestry (Three years at Elizabethtown and two years at Duke University, resulting in a bachelor's degree from Elizabethtown and a master's degree from Duke);

Pre-nursing (Two years at Elizabethtown and two years at Georgetown University, resulting in a bachelor of science degree from Georgetown).



Special academic options

Once you have begun intensive study in your major field, you may well find yourself so interested in some aspect of it that you want to explore it more fully than regular coursework allows. Through *independent study*, you can pursue a project of your own for a semester or a year, researching it and writing a professional paper under the guidance of your faculty adviser. Independent study is especially worthwhile if you plan to go on to graduate school because it refines your skills in the research methodology required in graduate studies.

Another academic option, *directed study*, allows you to take a regular course during a semester in which it is not offered to the student body as a whole. Because the professor who teaches the course will instruct you individually, you are in effect a class of one. This option can be helpful if you have a tight schedule and find it difficult to take a course that you need or want when it is normally offered.

One popular option is *study abroad*, whereby you may spend a year or more studying in England, France, Germany, Spain, Africa, or Mexico. You need not be a language major to qualify for foreign study; students have gone abroad to study political science, educational systems, social service organizations, music, and so on.

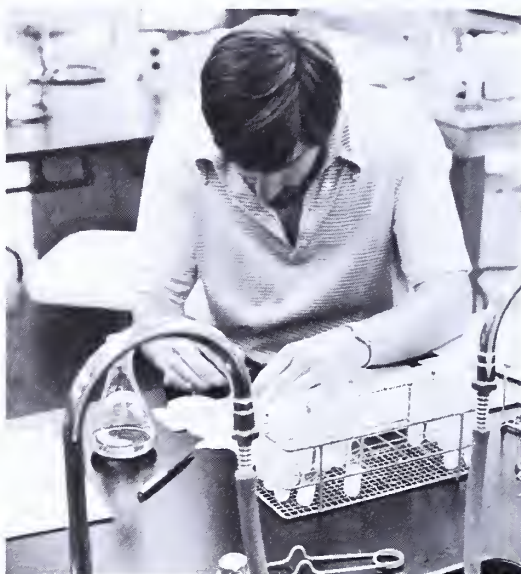
A PLACE TO LAUNCH A CAREER

One of the main reasons why you have decided to go to college is to prepare yourself for a career . . . even if you are not yet sure exactly what that career will be. This concern is natural and important, and you have every right to expect that the college you select will treat career planning and preparation as seriously as you do. At Elizabethtown we agree, and we offer:

An invaluable liberal arts background

The General Education curriculum not only helps you to choose a career, it also seeks to provide you with the breadth and flexibility to change careers as the times change.

A narrow vocational education may qualify you for a specific entry-level position, but it does not provide what you need to move beyond that point. When companies consider you for promotion into positions of responsibility, they do not look for technical skill; instead they look for your ability to reason objectively, to solve





problems, organize, and communicate effectively: which is to say, your ability to think. These are precisely the qualities that a broad intellectual training in the liberal arts will give you.

For careers change. A century ago carriage makers and railroad telegraphers were in great demand; today their skills are almost useless. The acceleration of technology means that the market for specific job skills changes at an ever faster pace, and it certainly makes little sense to spend all your college years preparing for a job that might become obsolete in a decade. It is estimated that today's college freshman will change *careers* (not jobs) five to seven times during his lifetime. Your program of study should anticipate *all* of those careers, not just the first one. A general liberal arts education will enable you to keep pace with change because it trains your mind to be flexible and to grasp new concepts.

People change, too. As you grow older, you may find that your interests take new directions; work which once challenged and fascinated you may come to seem like a straitjacket. Such growth is healthy and desirable, but it may be frustrating if you do not have the intellectual ability to discover and move towards a new and more fulfilling career.

Learning by experience

You should not, of course, neglect to prepare for your first career. Here, one of the finest learning processes is actual experience in your prospective field of work. Although classroom projects in many courses are based on situations you will meet on the job after graduation, the College can also offer you a more direct experience by placing you in work situations as part of your studies.

Field studies may involve work experience or observation—or a combination of the two. For example, in social work, the Urban Seminar will take you into a major metropolitan area where, for three weeks, you will undertake an on-site study of urban social problems as part of an evaluative comparison between urban and small town social welfare situations. In religion and philosophy, you may visit the major religious centers of the Eastern Seaboard to gain first-hand acquaintance with people who follow Hinduism, Buddhism, Taoism, Shinto, and other religions which are not common in this country. In economics, field trips to major financial centers enable you to see the applications of your studies in the workaday world.





Practicums and internships enable students to gain practical experience through working under the close supervision of a professional in the field. In the past, accounting students worked with auditing firms; communication arts majors have taken jobs with radio or TV stations, or on newspapers like the Harrisburg *Patriot-News*; chemistry majors have worked in gas chromatography with the Mobil Oil Company. Internships run from several weeks to a semester or a summer. When work interns return to campus they write a detailed paper on what they have gained from the experience. Students earn academic credit for a practicum or internship; however, few of these experiences provide a salary.

Learning by experience can help you decide whether you are ready to make a commitment to a specific career. You might find that the job or the field is not for you, after all. However, that discovery is also valuable; because you are still in college, you have time to alter your career direction.

Career counseling and placement

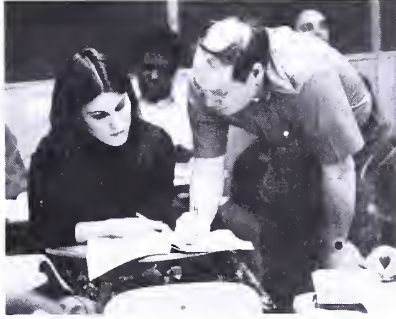
As you begin to consider career options you will find that the College offers three very useful kinds of resources: your professors, the Center for Counseling and Student Development, and the Career Development Center. As you get to know your professors, you will find that many of them have had substantial work experience beyond the teaching profession, and



that all of them are knowledgeable about the career and professional opportunities in their academic fields. At any time in your college life, they will be happy to sit down with you to discuss your career possibilities. The Center for Counseling and Student Development can also assist you in aligning your interests and abilities with your educational goals as you go about choosing a major.

To supplement and complement the counsel of professors, the College maintains a Career Planning Office which will help you explore career options and settle on the right career for you. A sizable library of career publications provides the latest information about specific careers—everything from the projected number of job openings in a specific field to surveys of salaries at the entry level.

When you begin to think about your first job (probably long before your senior year), that will likely mean some visits to the Placement Office, where the Director not only maintains a list of current job openings and potential employers, but also provides counsel in writing resumes and effective methods to be used in job interviews. The process is successful: 95% of the class of 1980 were either employed or enrolled in graduate and professional schools. (Incidentally, the Placement Office also will help you if you are looking for off-campus, part-time, and summer jobs, and the services of this office are open to alumni long after they have graduated from Elizabethtown.)



ENTERING ELIZABETHTOWN

If Elizabethtown sounds like your kind of college, your next question is whether you will be accepted for admission. Although that question cannot be answered fully until the Admissions Office sees your application form and high school transcript, you can arrive at a general idea of your chances. The College's admissions policies are both competitive and selective, requiring:

- Completion of a college preparatory program in an accredited high school with standing in the upper half of your class.
- A recommendation from your high school principal, your guidance counselor, or both, attesting to your academic ability and your character.
- Scores on the Scholastic Aptitude Test.

No quality college education is inexpensive; in 1981-82 cost for tuition, room, and board is

\$3,250 per semester for resident students; \$2,183 per semester for commuters. The College does, however, maintain an extensive financial aid program, with over 60% of the students receiving some form of assistance, usually in a package that combines grants, scholarships, loans, and on-campus jobs. If you think you will need financial help, the Office of Financial Aid would be happy to talk to you about it.

A catalog can give you some idea of what a college is like, but the best way to make your decision is to visit Elizabethtown. The Admissions Office will arrange a visit that matches your interests: sitting in on particular classes, talking informally with students, getting financial aid information, looking at the special equipment you will be working with in a year or two. The College welcomes the opportunity to become mutually acquainted.

ELIZABETHTOWN COLLEGE AT A GLANCE

The College: Elizabethtown is a four-year, co-educational college associated with the Church of the Brethren, offering a liberal arts education as well as preparation for specific careers. The College is located in Elizabethtown, a residential community in south central Pennsylvania, midway between Harrisburg and Lancaster.

Campus: The campus comprises 110 acres and 15 major buildings, all of which are new or renovated since 1957.

Students: There are about 1420 students, of which 1200 are resident students representing about 18 states and six foreign countries.

Accreditation: Elizabethtown is fully accredited by the Middle States Association of Colleges and Secondary Schools as well as by many professional associations.

Degrees Offered: The College offers the Bachelor of Arts, Bachelor of Science, Bachelor of Liberal Arts, Bachelor of Professional Studies, Associate of Arts, and Associate of Science degrees.

Fields of Study: A complete list of majors is provided on page 35 of this catalog.

Academic Options: Elizabethtown offers such optional academic opportunities as independent study and research, tutorials, directed study, field studies or internships in most departments, study abroad programs.

Faculty: The full-time faculty consists of 100 members, providing a student-faculty ratio of 14 to 1.

Library: The library has 150,000 bound volumes in open stacks, 665 periodicals, a large reading room, small study rooms, a music listening room, and collections of musical recordings, art slides, microforms.

Residence Halls: Diverse living arrangements are available within the six residence halls, which are equipped with lounges, color TVs, pianos, ping pong tables, vending machines, washers and dryers, kitchen facilities.

Student Clubs and Activities: Elizabethtown offers a wide range of different student activities, covering a range of academic, musical, dramatic, communications, and special interest opportunities. There is a strong, active student government.

Cultural and Recreational Activities: The College maintains a cultural program which brings to campus nationally known speakers, musical and theatrical groups, solo perform-

ers. The hub of recreational activities is the Baugher Student Center, which provides a swimming pool and bowling lanes as well as other recreational facilities. The proximity of the College to metropolitan centers of the Eastern Seaboard also makes countless cultural and recreational activities available.

Religious Life: Attendance is not required, but students of various faiths are encouraged to participate in on-campus and off-campus religious services.

Student Counseling Services: As needed, students are urged to take advantage of academic counseling, personal counseling, remedial academic and tutorial assistance, career counseling, job placement, graduate and professional school advisement, medical services.

Athletics: Elizabethtown fields NCAA intercollegiate teams for men in baseball, basketball, soccer, swimming, tennis, coed track, and wrestling. It fields NAIA women's teams in basketball, field hockey, softball, swimming, tennis, volleyball, and coed track. In addition, throughout the year there is an active intramural program for all students.

Costs (1981-1982): The 1981-1982 comprehensive fee (including tuition, room, board) is \$3,250 per semester for resident students. The fee for commuters (which does not include room and board) is \$2,183 per semester. Additional costs include books (about \$200 a year), personal expenses, personal transportation.

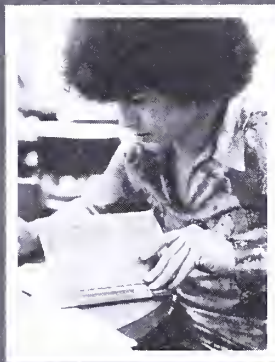
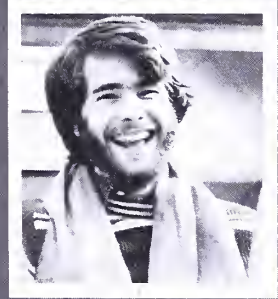
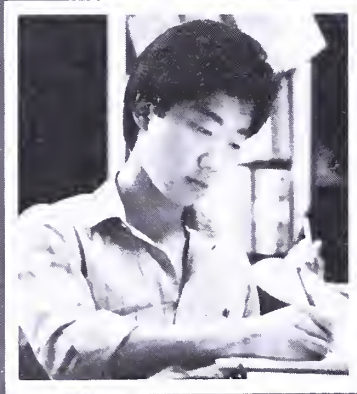
Financial Aid: The College offers a package of aid consisting of scholarship, grants, loans, and student employment. About 60% of all students receive some form of financial aid through the College.

Admission Plans: Elizabethtown offers a rolling admission plan, with each application considered as it is received. However, there is an April 1 deadline for freshman applications. For outstanding high school juniors, there is an Early Admissions Plan. Qualified students who have attended a regionally accredited two-year or four-year institution with at least a 2.0 average may apply for transfer to Elizabethtown.

Admissions Fees: There is a non-returnable \$15 fee which must accompany the application for admission. On acceptance, there is a \$100 acceptance fee, which is applied to the first year's tuition.

Campus Visit: Although a campus visit is not mandatory, it is strongly recommended.

Admissions



Admissions

ENTERING THE COLLEGE

Elizabethtown College seeks serious students who intend to apply themselves to the educational process. Interested students are urged to look closely at the College's varied academic offerings, its educational philosophy, and its physical facilities. Visits to campus are encouraged and may be arranged through the Office of Admissions.

The College reserves the right to admit students on a selective basis in order to maintain departments and majors of an effective size. Students are admitted without reference to race, color, creed, sex, or national origin. Students may be admitted under four admissions plans: regular, early, transfer, and special.

Regular Admissions Plan

Young men and women who are high school graduates and whose records indicate serious scholarship, good character, and satisfactory health are encouraged to apply for admission to Elizabethtown College. They should communicate with the Director of Admissions to obtain the proper application forms and any detailed information which may be required. The College evaluates applications using the following guidelines:

1. The student must be a graduate of a senior high school accredited by the regional accrediting agency or by the Department of Education of the state in which he lives.
2. The student's high school principal or guidance counselor must recommend admission both in regard to academic ability and to character.
3. The student must have completed the College Preparatory curriculum in his high school. However, the College may admit a student who has not completed such a course of study, but whom it deems qualified for entrance on the basis of test scores or other means of evaluation.
4. The student must take the Scholastic Aptitude Test administered by the College Entrance Examination Board (Box 592, Princeton, New Jersey 68540).
5. The student should visit the College for an on-campus interview. (While optional, an interview is strongly recommended.)

6. On being admitted to the College, the student should file a physician's statement on a form provided by the College.

Advanced Placement Program (CEEB):

Elizabethtown College participates in the Advanced Placement Program of the College Entrance Examination Board. With the approval of the department concerned, the College may grant advanced placement and credit to students who perform satisfactorily in college-level courses and on the Advanced Placement Examination.

Early Admissions Plan

To enable superior high school students to move more quickly into their higher education, Elizabethtown College will allow carefully selected students to begin their college work immediately after completing the junior year in high school. Students enrolled under this program enter the College as regular freshmen; upon successful completion of the freshman year they are granted a high school diploma in addition to the college credits earned. This program has the full cooperation and support of the Pennsylvania Department of Education.

All degree programs at the College are available to these selected students, who are expected to exhibit the mental and emotional maturity necessary to adjust to the general program of the College. Following enrollment, students receive close academic guidance by selected faculty members.

All applicants for the accelerated admissions program are carefully screened on a highly individualized basis. In addition to the fundamental requirement that students must have completed their eleventh year in an accredited high school program, the College gives acute attention to the following factors: mental ability, scholastic achievement, social and physical maturity, and personal motivation.

1. Students must rank in the upper percentiles of their high school class; furthermore, their performance on the Scholastic Aptitude Test is given weighty consideration.
2. The College accords great importance to the opinions and predictions of the student's high school principal and guidance counselor, and to those of the College's department chairman in the student's prospective major.
3. The written approval of the student's parents, high school principal, and guidance counselor is mandatory before the student can be accepted. In addition to the indi-

cated statistical data, the selection process includes a conference with the student by the Director of Admissions.

Any student interested in applying for this accelerated program should first discuss the matter thoroughly with the high school guidance counselor and then write to the Director of Admissions at Elizabethtown College for an application form.

Transfer Admissions Plan

Elizabethtown College welcomes students who have been enrolled at two-year or four-year colleges. To be fully matriculated, transfer students must provide evidence of good social and academic standing from the previous college.

Students, who, at the time of matriculation, are graduates of a degree granting, two-year college accredited by one of the six regional accrediting agencies will receive advanced standing. All students who transfer from regionally accredited two-year colleges may transfer a maximum of 64 hours of credit to Elizabethtown College and will be required to earn a minimum of 64 additional semester hours in order to graduate from the College.

Students who transfer from an accredited two-year college without an associate degree may transfer a maximum of 64 hours of credit to Elizabethtown College. When the total number of transfer credits and credits earned at Elizabethtown College exceeds 59, placing the student in junior status, the student is not permitted to transfer additional credits from a junior college.

Students who have attended four-year colleges or universities accredited by one of the six regional accrediting agencies will be permitted to transfer previous academic credit; however, in order to meet graduation requirements, the student must earn a minimum of 30 semester hours credit in classes on the Elizabethtown College campus. These 30 credits must be included within the most recent 60 credits, and a minimum of 15 of the 30 credits must be in the major department. At least 8 of these 15 must be on the upper level (normally 300- or 400-level).

College courses which carry a grade of C or P or better from other regionally accredited institutions, and which are acceptable toward a degree at Elizabethtown College may be transferred upon the approval of the Registrar.

Credit will be granted for those courses that satisfy the student's major or general education Core requirements at the College. Other courses will be considered for elective credit. In any doubtful situations, the Registrar will

consult the department chairman and the Dean of the Faculty. Grades are not transferrable; courses and credits, however, may be transferred.

In addition to the six guidelines listed under the Regular Admission Plan, the prospective transfer student will need to present an official transcript indicating work completed at, and honorable dismissal from all colleges attended. The College will request recommendations from the dean of the college last attended. Students from non-accredited institutions should see the special admissions plan described below.

Special Admissions Plans

The College offers provisional special admissions under the following two programs. In each program, as many as possible of the principles listed under the Regular Admissions Plan will be followed.

Transfer students from non-accredited colleges:

Students who have attended a non-accredited institution may wish to enroll at Elizabethtown. In cases in which the record is above average, the College may allow a student to validate this non-accredited work by passing more advanced courses at Elizabethtown. In such cases, Elizabethtown reserves the right to revise the evaluation after the equivalent of one semester's work at Elizabethtown College. Full admission may be granted after completion of 15 hours of work with grades of C or better. Such students may also validate credit by passing the College Level Examination Program Tests upon the approval of the department concerned and the Dean of the Faculty. The validation of prior learning through testing is limited to a maximum of 64 semester hours.

Continuing education for older adults:

In some instances adults who may be deficient in some of the college entrance requirements wish to enroll in college study. In those cases in which successful work and other pursuits indicate basic academic aptitudes and achievements, a person may be admitted as a special student on a provisional basis. In such cases full admission may be granted after the completion of 15 hours of college study with grades of C or better. The validation of prior learning through testing is limited to a maximum of 64 semester hours. Such credits are considered as transfer credits for purposes of establishing residency. Individuals interested in continuing education will wish to consult the program description on page 40 of this catalog, as well as the Center for Continuing Education itself in Nicarry Hall.

Cost and Financial Aid



Financial Information

Annual Expenses

The expenses for the year are covered by a comprehensive fee, which for resident students includes tuition, class dues, a furnished room, and board (the cafeteria closes after the noon meal on the day on which the College recesses for vacation, holiday, or semester break, and reopens for the evening meal the day before classes resume); use of the library, the student center, the gymnasium and athletic fields; admission to all athletic games on the campus, and to community cultural programs; subscription to *The Etownian*, limited use of the infirmary (resident students only).

Detailed costs for Elizabethtown College may be found in the pamphlet, "Annual Expenses," available from the Business Office. Costs for the 1981-82 academic year follow: resident student, \$6,500; commuter student, \$4,365.

All charges are payable prior to registration each term. Credit allowed for College scholarships, grants-in-aid, matriculation or pre-registration deposits will be deducted from the invoice. To be eligible for college aid, a student must be enrolled full-time.

Absences and Sickness

A student who is absent from the College because of sickness, or for any other reason, and who retains his place in class, pays in full during his absence.

Withdrawal

Full-time students give their notice of withdrawal in writing to the Center for counseling and Student Development; part-time students, to the Registrar's office. If withdrawal occurs within the three weeks prior to the date of registration in either semester, a resident student is liable for a \$150.00 room penalty in addition to the pre-registration or matriculation deposit. The room penalty when paid will be credited to the student's account should the student return to the College in a later semester as a resident student. If a student withdraws, changes credit hours, and/or room and board status after the beginning of the semester, the student is obligated for a full semester's room charge and actual board used to the date of withdrawal,

plus 25 percent of the unused board. Tuition charges will be refunded on the following basis:

First week	75%
Second through Third weeks	50%
Fourth week	25%
Beginning of the Fifth week	00%

The effective date for calculating the above refunds will be the date of receipt of a written notice of voluntary withdrawal in the Center for counseling and Student Development Center. Failure to give notice of withdrawal will result in an unofficial withdrawal. Refunds, transcripts, and recommendations will be withheld by the College until an official withdrawal has been obtained. Refunds for a withdrawal due to medical reasons or when a student is suspended or dismissed from College will be prorated to the date of the withdrawal. All refunds will be paid within thirty days of graduation or withdrawal. Refunds for currently enrolled students must be requested in writing. (Registration counts as the beginning of college).

Change of Status

The above withdrawal policy is also in force when a student changes credit hours, or room and board status, or both.

General Expenses

An *application fee* of \$15.00 must accompany the application for admission. This fee covers the cost of processing the prospective student's application, is non-refundable, and cannot be applied toward the payment of other charges.

An applicant should send the Director of Admissions, Elizabethtown College, a *matriculation deposit* of \$100.00 within 30 days after receiving a letter of acceptance. This amount will be applied to the applicant's account as a credit on the first tuition billing. The deposit is not refundable except that \$50.00 will be returned in event of withdrawal prior to February 15. If an applicant intends to postpone the decision until the financial aid package is received, the matriculation deposit will be due 30 days from the date of the receipt of the aid package.

During the spring semester, a *pre-registration deposit* in the amount of \$100.00 is required of all current students who plan to return to college in the fall. This deposit must be paid before a student will be permitted to pre-register for the fall semester. The \$100.00 deposit will be applied only as a credit on the fall semester billing, and is not refundable.

Cap, gown, and hood rental is paid upon placing an order at the bookstore.

Two transcripts of record will be provided free of charge to students in regular attendance and of freshmen, sophomore, or junior status. Seniors may have a maximum of ten transcripts of record free of charge when applying to graduate/professional schools or for employment. Two copies of the final record are also available free to each student after graduation. A charge of \$2.00 per copy will be made for all other transcripts. No transcripts of record are furnished to anyone whose account is not paid in full.

Checks should be made payable to Elizabeth-town College.

Tuition and Fees for Medical Technology Students

There is an administrative charge of ten per cent of the College's tuition fees to the medical technology students entering their clinical year. In addition these students will pay the hospital any charges directly related to the year of study.

Off-campus Placement

Students may be required to pay any fees charged by agencies or clinical facilities for student placement in programs such as occupational therapy, medical technology, music therapy, education, and so forth, where placement is required by professional accrediting association, the joint program, or other program imperatives.

Financial Aid Policies and Programs

STUDENT AS CONSUMER

The U. S. Office of Education, in section 493A of the Higher Education Act as amended in 1976, requires post-secondary educational institutions to disseminate relevant, candid information on a variety of topics to prospective and enrolled students who request it. As education consumers, students should have available full, up-to-date information in order to make wise decisions about their educational futures.

POLICIES

The Student Financial Aid Program at Elizabethtown College operates in harmony with the principles of student financial aid administration developed by the College Scholarship Service Assembly of the College Entrance Examination Board. The primary goal is to help meet the financial need of students to enable them to secure a college education. Consequently, the number of no-need awards (awards based exclusively on factors other than financial need), is controlled in order to permit a majority of college funds to be used to meet financial need.

1. Elizabethtown College is committed to assuring equal opportunity to all persons regardless of race, religion, ancestry, color, national origin, sex, or handicap. This policy extends to employment, admission to the College, and consideration for student financial aids, and is in compliance with all federal laws, including Title IX of the Education Amendments of 1972.
2. Each applicant for financial aid must be accepted by Elizabethtown College and must have submitted an Elizabethtown College Application for Student Financial Aid, as well as a Financial Aid Form available from high school counselors or the Financial Aid Office. The filing deadline at Elizabethtown College is April 1. If a stu-

dent applies only for no-need grants, a Financial Aid Form is not necessary; however, the application must be received by the Financial Aid Office by March 1.

3. Late applications will be considered only if necessary funds are available.
4. The amount of financial aid granted to any student is based upon the extent of his financial need (defined as the difference between the total expenses of attending college and the total financial resources available to meet this expense) and the availability of necessary funds. The College considers financial aid to be a partnership shared by the student, parents, and College.
5. The College will determine which programs of available financial aid best satisfy the need of the individual students. An award may be single, or a combination of several forms of financial aid. Usually the package is made up from a combination of three elements: grants, loans, and work.

Note: A student has 30 days from the time he receives notice of a financial award either to accept or reject the College's offer.

6. Students may lose financial aid by failing to maintain satisfactory academic performance or to make normal progress in accordance with the standards outlined in the college catalog.
7. Students must re-apply each year for all financial aid. No aid is automatically renewed.
8. Students' financial aid may change from year to year with changes in their financial status and in the availability of funds.
9. **Refund Policy:** Students who withdraw from the College after the beginning of the semester are obligated to pay the full semester's room charges; the actual board used to the date of withdrawal, plus 25 percent of the unused board. Tuition charges will be refunded on the following basis (the first day of registration counts as the beginning of college):

First week	75%
Second through third week	50%
Fourth week	25%
Beginning of fifth week	00%

10. Parents have a legal and moral responsibility to provide a reasonable amount of financial assistance toward a student's college expenses. The fact that a student desires to be financially independent does not release parents from this responsibility.
11. Financial aid applicants who have previously attended another post—secondary school, college, or university must submit to the Financial Aid Office an official Financial Aid Transcript to document their financial aid record at all previous institutions.
12. The College holds in strictest confidence all financial information which it receives, and it considers any award to be a confidential matter between the College, the applicant, and the applicant's family. The College does not release information about individual awards and considers it inappropriate for aid recipients to do so.
13. All awards will be made for one academic year and will be divided equally between the two semesters.
14. Elizabethtown College reserves the right to make changes in the amount and type of a student's financial aid at any time during a year in which either the student receives additional unanticipated assistance from an outside source, or the College receives information about current family income which varies from the income reported on the Financial Aid Form. Such changes are not only made to protect the equity of financial aid awards, they are also usually mandated by federal program requirements on aid eligibility.
15. No student may receive more than eight semesters of institutional financial assistance; the College will not award aid to students who already possess a bachelor's degree.
16. A student must be enrolled on a full-time basis to be eligible for most institutional assistance.
17. Withdrawal from Elizabethtown College terminates any aid commitment by the College.
18. Foreign students wishing to study at Elizabethtown College need to show legal documentation that adequate financial resources are available to them before the Financial Aid Director will release the I-20 (student visa) Form.
19. A student receiving employee tuition benefits is ineligible for any other college-administered gift aid unless the student shows financial need or receives an academic scholarship.

Note: Data describing student retention at Elizabethtown College may be obtained from the offices of the Dean of the Faculty and the Dean of Student Affairs.

PROGRAMS

Scholarships

Elizabethtown College Presidential Scholarships

Six competitive scholarships are awarded annually to academically superior entering freshmen. Each award amounts to \$2,000 per academic year; financial need is not a factor considered in the selection process.

Applicants must rank in the top five percent of their secondary school class at the time they apply and must have achieved a combined Scholastic Aptitude Test score of at least 1100 on the College Entrance Examination Board test. In addition, applicants must plan to be enrolled full-time (12 credit hours or more) and display good academic promise, achievement, and citizenship; recipients of the scholarship must maintain these requirements to be eligible for scholarship renewal.

Elizabethtown College Academic Scholarships

These competitive scholarships are based on the academic record of the student, and range from \$200 to \$1,500. Students must rank in the upper ten percent of their high school class and have a minimum combination score of at least 1000 in the College Entrance Examination Board Tests or a composite score of 22 in the ACT test. Transfer students may also apply for this scholarship. They will be evaluated on the basis of their high school records, College Entrance Examination Board or ACT scores, and their records at their previous institution of higher education. Because these scholarships are awarded on a competitive basis, students do not automatically receive a scholarship if they meet the minimum requirements.

Elizabethtown College Dean's Privilege Scholarships

A student who has a cumulative quality point ratio of at least 3.50 at the end of his sophomore year at Elizabethtown College is eligible to apply for this scholarship. Eight \$500 awards are given annually. Students already receiving an academic scholarship of equal or greater value are not eligible.

Other Scholarship Programs

The Ruth Eshelman Althouse Scholarship was established to provide scholarship aid to an outstanding full-time student who has completed two years of study at Elizabethtown College, and who anticipates a career in elementary or secondary education.

The A. Warren Angstadt Tennis Scholarship was established to provide scholarship aid to two students in good academic standing who demonstrate financial need, display acceptable campus citizenship, and who play well in intercollegiate tennis.

The Bethany Brethren Hospital Scholarship is awarded annually by the Bethany Brethren Hospital based upon academic record, college activities, and financial need.

The Black Scholarship Fund was established to provide scholarship aid for black students who would otherwise not be able to matriculate at Elizabethtown College because of financial need.

The Erna and Dorsey Blecher Scholarship was established to provide scholarship aid to a student enrolled at the College.

The Grace C. Blough Music Scholarship Fund was established to provide scholarship aid to a student who excels in musical aptitude and performance, academic achievement, and personal character, and who exhibits financial need.

The Thomas C. Conover Memorial Scholarship was established to provide scholarship aid to a full-time upperclass biology major who exhibits excellence in academic achievement, scientific attitude, and personal character.

The Robert S. Doherty Scholarship was established to provide scholarship aid to a student demonstrating scholastic ability, excellent athletic performance, and potential in track or cross-country athletics, who exhibits financial need and is possessed of good personal character.

The Herman G. Enterline Scholarship was established to provide scholarship aid to a student enrolled in the business program (when-ever possible a future teacher), who exhibits academic excellence in that field.

The Eby C. Espenshade Scholarship was established to provide scholarship aid to any student enrolled at the College who exhibits financial need and who possesses the ability to excel in his college studies.

The Elmer Espenshade Scholarship Fund was established to provide scholarship aid to students from Lancaster County who exhibit financial need, academic ability, leadership potential, and who actively participate in campus activities.

The Fund for the Advancement of Ethnic Understanding was established by the Bucher families to foster the cause of underprivileged ethnic minorities in the form of scholarship aid or program aid.

The Future Business Leaders of America Scholarship is awarded by the FBLA to a freshman, based upon the student's demonstrated involvement in FBLA in high school and an above-average academic record.

Gettysburg Church of the Brethren Scholarship Fund was established to provide scholarship aid to a student enrolled at Elizabethtown who is a member of the congregation at the Gettysburg Church of the Brethren.

The Greyhound Corporation Scholarship for Black Students is made available annually from the Greyhound Corporation to an incoming freshman who exhibits financial need.

The Hamilton Bank Work Scholarship Program is presented annually to a freshman student planning to pursue a career in business, who resides in the Harrisburg area. The student must be employed by Hamilton Bank during the summers, must demonstrate financial need, and must maintain a minimum 2.0 GPA.

The Howard W. and Margie F. Henry Scholarship Fund was established to provide aid to a student who is (in preferential sequence): a pre-ministerial student with evangelical orientation; a student preparing for foreign or home mission service; a student majoring in music; or a student majoring in a pre-nursing program. The recipient should be from Franklin County.

The Elizabethtown Kiwanis Golden Anniversary Scholarship was established by Elizabethtown College with the Elizabethtown Kiwanis to provide scholarship aid to a full-time student who has graduated from Elizabethtown Area High School or who is a bona fide resident of the school district, based upon academic ability, citizenship, and financial need.

The Edgar Leer Ministerial Scholarship was established to provide scholarship aid for a worthy student preparing for the ministry.

The Emma G. Musselman Foundation Business Scholarship was established to provide scholarship aid to a student who has completed four full-time semesters at the College and a minimum of 12 semester hours of business courses, who demonstrates academic excellence and excellent personal character. The scholarship provides the student who continues excellent work with aid in both the junior and senior years.

The Benjamin G. and Vera B. Musser Pre-Medical Scholarship was established to provide scholarship aid to an upperclass student who evidences a sincere desire to pursue a career in the medical profession, and who is chosen on the basis of academic performance, financial need, and faculty letters of recommendation.

The Purchasing Management Association Scholarship is made available by this Association to provide scholarship aid to a senior majoring in either business administration, economics, or accounting, based upon his academic achievement.

The R. Kent Replogle Scholarship was established to provide scholarship aid to a worthy senior who demonstrates financial need, who has achieved a GPA of 2.75 over-all and at least 3.00 in his major field of study, and who has won at least two varsity letters in inter-collegiate athletic competition for Elizabethtown College.

The Ressler Mill Foundation Scholarship Fund was established to provide scholarship aid to a full-time junior (for the senior year) majoring in occupational therapy, based upon academic achievement, scientific aptitude, personal character, and financial need.

The Charles Troxell Royer Memorial Scholarship was established to provide scholarship aid to a student preparing for service in the mission field.

The Mary Sachs Scholarship Fund was established to provide scholarship aid to one or more outstanding students preparing for a career in the field of business and exhibiting financial need.

The Andrew C. Schaedler Foundation Scholarship was established to provide scholarship aid to a worthy and needy student from central Pennsylvania who has graduated from a high school in Dauphin, Lebanon, Cumberland, York, Franklin, Lancaster, Perry, Juniata, Mifflin, Adams, Northumberland, or Huntingdon counties.

The John P. Shepherd, Jr. Athletic Scholarship was established to provide scholarship aid to a full-time upperclass student who shows excellence in academic achievement, athletic performance, and personal character.

The Harold E. Smith Company Occupational Therapy Scholarship was established to provide scholarship aid to a full-time sophomore (for the junior year) majoring in occupational therapy, based upon academic achievement, scientific aptitude, personal character, and financial need.

The Sperry New Holland Scholarship was established to provide scholarship aid annually to three students, a sophomore, a junior and a senior, each majoring in the field of business, showing academic achievement, exceptional individual performance in extra-curricular activities, and financial need.

The Student Volunteer Missionary Scholarship was established to provide scholarship aid to students preparing for active missionary service.

The Victor F. Weaver, Inc. Scholarship Fund was established to provide scholarship aid to employees or the children of employees of this firm, who are enrolled on a full-time basis at Elizabethtown College, based upon scholastic achievement.

Grants

Pell (Basic Educational Opportunity) Grants

The BEOG is a federally funded gift assistance aid program. This program provides for aid to needy students based upon a formula unique to the program. Students desiring consideration must complete a BEOG/Pennsylvania Higher Education Assistance Agency (PHEAA) composite application form and submit it to PHEAA, which will analyze the information submitted and advise the student of his "Student Eligibility Index." The student must then forward the Eligibility Report to the college aid officer who will determine within guidelines the value of the student's award and notify the students. By law, such an award cannot exceed \$1,900 or half of the cost of attendance, whichever is less, in 1981-82, and \$2,100 in 1982-83.

Supplemental Educational Opportunity Grants

Under the provisions of the Federal Higher Education Act of 1965 as amended in 1972, the College awards Supplemental Opportunity Grants to needy students. A student must be enrolled or accepted for enrollment on at least a half-time basis, must be capable of maintaining good academic standing, and have exceptional financial need. This grant is awarded on the basis of financial need as determined by the Financial Aid Form. The maximum annual award is \$2,000.

Pennsylvania Higher Education Assistance Agency (PHEAA) Grants

The PHEAA is responsible for the administration of the State Grant Program in Pennsylvania. Any Pennsylvania high school graduate who took the Scholastic Aptitude Test of the College Entrance Examination Board or the American College Test of the American College Testing Service during the junior year will be sent a State Grant application during October of his senior year. Any student who did not as a junior take either of these two tests is responsible for securing an application from his high school guidance counselor during November of his senior year or from the PHEAA, Grant Division, Towne House, Harrisburg, Pennsylvania 17102. The deadline for submitting the application to PHEAA is May 1 if the student plans to attend a four-year institution like Elizabethtown College. The maximum annual award is \$1,500.

The guidelines for the program state that an applicant must be (1) a citizen of the United States or taking steps to become a citizen; (2) a resident of Pennsylvania for 12 months immediately prior to the date of application; (3) classified as a full-time student (i.e., taking at least 12 semester hours that will count toward graduation). The awards are based upon financial need rather than scholastic achievement, although a student must maintain progress toward a degree.

Students other than current high school seniors who did not have a State Grant for the prior year may secure an application from the Financial Aid Office at Elizabethtown or from the PHEAA in Harrisburg. The filing deadline for this category of applications will probably be May 1.

Students in other states should contact their high school guidance counselors for information about possible state scholarship programs. Applicants for financial aid from the College are expected to apply for state scholarship or grant aid where available.

Elizabethtown College Grants

Elizabethtown College Grants are available to students who demonstrate financial need by filling the Financial Aid Form. Students chosen for these grants must demonstrate positive leadership, special talent, or general service in high school, college, or local community activities. A student must apply annually to be considered for an Elizabethtown College Grant. A renewal applicant must have at least a 1.80 cumulative average by the end of the freshman year, a 1.90 cumulative average by the end of the sophomore year, and a 2.00 cumulative average by the end of the junior year. In addition, continued significant levels of participation in college or community activities must be evident.

Other Grants

There are several other grant programs for students who meet specific criteria of eligibility. ***Parish Grants*** of \$200 per year are available to students who are members in good standing of the Church of the Brethren. ***Sibling Grants*** of \$250 per year are available when two members of the same family enroll as regular full-time students at the College during the same academic year. The children of full-time ministers in the Church of the Brethren are eligible for the ***Minister's Child Grant*** of \$200 per year. Information to verify eligibility is secured from the student's institutional financial aid application.

Employment

Work-Study Program

The College sponsors a Work-Study Program developed by the Federal Government under the Federal Economic Opportunity Act of 1964 for students who can demonstrate financial need. The need of each student is determined by the Financial Aid Form. A student employed under the Work-Study Program works in the same areas as a student employed under the Self-Help program. Work-Study students are given job priority over Self-Help students.

Elizabethtown College Self-Help Program

The College provides a large number of part-time employment opportunities for students in the dining hall, library, laboratories, residence halls, academic departments, and other areas. The dollar value of the assignments depends upon the nature of the work and the number of hours that the student can work each week. Students are paid at the rate established by the federal government for full-time students. Students currently enrolled at Elizabethtown College and, among them, students requiring fi-

financial aid, are given preference for student employment. The filing of a Financial Aid Form is requested but not required for this program.

Loans

National Direct Student Loan Program

Loans amounting to a maximum of \$1,500 per academic year are available through the College to qualifying students. The cumulative undergraduate borrowing ceiling is \$6,000. To be eligible, a student must be enrolled or accepted for enrollment as at least a half-time student, must demonstrate a definite need for a loan to pursue his course of study, and must be capable of maintaining a satisfactory academic standing. The financial need of the student is determined by the Financial Aid Form. The student borrower is not required to repay any principal or interest while he maintains satisfactory academic standing at the College. Upon graduation or other withdrawal, the borrower is given a repayment schedule and a six-month grace period. The interest rate is currently four percent per year on the outstanding balance. This loan program currently has a cancellation benefit for those students who plan to enter certain education fields; deferments are granted for graduate school, Peace Corps, VISTA, and the Armed Services.

State Guaranteed Student Loan Program

Under the provisions of the Federal Higher Education Act of 1965 as amended in 1976, most states have a Guaranteed Loan Program for college students. Students should consult their guidance counselor or a local banking institution for more information on the program. The programs are comparable in most states.

The maximum loan per academic year is \$2,500 and \$12,500 per dependent undergraduate experience (four years). Independent students may borrow \$3,000 per year and \$15,000 cumulatively. The federal government will pay the interest on all eligible Guaranteed Loans until nine months following the student's separation from the College at which time the student assumes the responsibility of repayment. The loan carries an interest rate of nine per cent. Applications are available only from participating lending institutions, a list of which is available from the student's secondary school counselor. Processing should begin on these loans by June 1 of each year at the latest in order for students to receive the funds in time for registration.

Parent Loan Program

This program allows parents to borrow up to \$3,000 a year for each child in college, up to a total of \$15,000. The regulations require parents to begin repayment within 60 days after they receive a loan. Interest on loans will be nine percent, but will be reduced to eight per cent if the interest paid on U.S. Treasury bills drops below nine percent.

External Financing Plans

The Girard Edu-Check Plan, available through Girard Trust Bank, enables the family to pay for college expenses on a monthly basis from current income. An important feature of the plan is the insurance coverage: if the parents' earning power is destroyed by disability or death, funds are provided each year to enable the student to complete his education.

Richard C. Knight Insurance Agency, Inc. offers two plans for financing a student's college expenses: the Insured Tuition Payment Plan and the Extended Repayment Plan. More information on these plans is available from the Financial Aid Office.

FINANCIAL AID APPLICATION PROCEDURE

Each applicant must file a financial aid application with the Financial Aid Office no later than April 1 to be considered for financial assistance for the following academic year. However, students applying for the Elizabethtown College Academic Scholarship must file by March 1. A student may secure an application for financial assistance by writing to the Financial Aid Office.

Each applicant for financial assistance must submit a Financial Aid Form to the College Scholarship Service in Princeton, New Jersey for processing. The Financial Aid Form enables the College to evaluate each applicant's need on a standard basis and may be secured from high school counselors or the Financial Aid Office at Elizabethtown College. (Students who are interested in applying only for the Elizabethtown College Academic Scholarship or Presidential Scholarship do not have to file a Financial Aid Form.)

Since it usually requires at least one month to process a Financial Aid Form, students should complete the statement and mail it to the College Scholarship Service no later than March 1

of each year for the College to have the results by the April 1 deadline. A student's financial aid application will not be considered complete until the results of the Financial Aid Form and the Financial Aid Application are received by the Financial Aid Office.

GENERAL INFORMATION REGARDING FINANCIAL AID

Elizabethtown College will begin making financial aid awards for the 1981-82 and 1982-83 academic year in October 1980, and October 1981, respectively. The Financial Aid Office hopes to notify all financial aid recipients before the end of May 1981, and May 1982. Those who require an earlier decision of their financial aid application due to special circumstances should write directly to the Financial Aid Office indicating the reason why early financial aid consideration is required. The Financial Aid Office will try to inform them of the College's action. Those who have not received any reply from the College regarding financial aid by the end of May 1981, or May 1982 should contact the Financial Aid Office immediately. The Financial Aid Officer will be happy to schedule a personal interview with students and parents regarding their financial situation and the possibilities of financial aid at Elizabethtown College. An appointment may be obtained by writing to the Financial Aid Office at the College.

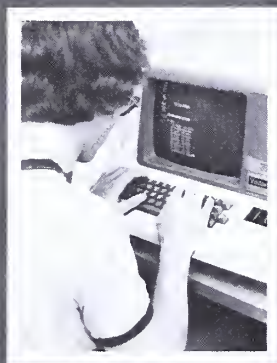
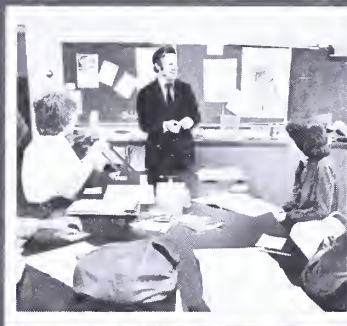
Since the sources of financial aid which are administered by the College are limited, the College is not able to award financial assistance to every qualified applicant. Students are encouraged to contact their high school counselors regarding other scholarships awarded by local organizations such as the Lions Club, Kiwanis Club, and the PTA. Students should check with their parents' employers regarding scholarship programs, and should investigate other external sources of financial aid such as the State Scholarship and Loan Programs.

All requests for applications and other information regarding financial aid should be directed to the Financial Aid Office, Baugher Student Center, Elizabethtown College, Elizabethtown, Pennsylvania 17022.

The complete counseling services of the Financial Aid Office are available to both enrolled and prospective students; services include information dissemination, budgeting assistance, and general assistance in planning the financing of a college education.

Appointments are scheduled between the hours of 8:30 a.m. and 5:00 p.m., Monday through Friday. The above financial aid policies and program descriptions are subject to change at any time as the result of new or amended state or federal legislation and changes in Elizabethtown College policies.

The Academic Program



The Academic Program

DEGREES OFFERED

Elizabethtown College grants three residence degrees: the Bachelor of Arts, Bachelor of Science, and Associate of Science.

Both bachelor degrees require the completion of 128 semester hours of credit, an average of at least 2.00 in the major, an average of at least 2.00 overall, and the completion of all requirements of the major and the General Education Core. Requirements for the associate degree, offered only in medical secretarial science, are the same except that only 64 credits are needed.

The College offers four additional degrees through the Center for Continuing Education: the Bachelor of Liberal Arts, the Bachelor of Professional Studies; the Associate of Arts, and the Associate of Science.

THE ACADEMIC MAJOR

The College offers degrees in the following academic majors within which a number of options and concentrations are available. For details of courses, options, concentrations, and major requirements, students should consult the departmental listings in this catalog.

Accounting (Business), B.S.
 Biology, B.S.
 Business Administration, B.S.
 Business Education (Business), B.S.
 Chemistry, B.S.
 Communication Arts, B.A.
 Computer Science, B.S.
 Early Childhood Education, B.S.
 Economics (Business), B.A., B.S.
 Elementary Education, B.S.
 Engineering (Physics), B.A.
 English, B.A.
 Forestry and Environmental Management (Interdisciplinary), B.S.
 General Science Certification (Interdisciplinary), B.S.
 History, B.A.
 Mathematics, B.S.
 Medical Secretarial Science (Business), A.S.
 Medical Technology (Chemistry), B.S.
 Modern Languages, B.A.

Music, B.A.
 Music Education, B.S.
 Music Therapy, B.S.
 Occupational Therapy, B.S.
 Physics, B.S.
 Political Science, B.A.
 Psychology, B.A., B.S.
 Religion and Philosophy, B.A.
 Social Studies Certification (Interdisciplinary), B.S.
 Social Work (Sociology), B.A., B.S.
 Sociology, B.A., B.S.
 Sociology-Anthropology, B.A., B.S.

THE COLLEGE WRITING COMPETENCY REQUIREMENT

Those incoming freshmen whose record fails to demonstrate basic language skills and writing ability are required to take either (1) English 021 (Basic English) followed by English 100 (Expository Writing) or (2) English 100. Those students who demonstrate competency in language and writing skills will be permitted to proceed to English 105 (Introduction to Literature).

THE GENERAL EDUCATION CORE

Through the General Education Core curriculum the College affords each student a broad exposure to the liberal arts and the sciences, and thus ensures a general comprehensive education which complements both the more intensive studies in the academic major and the less structured framework of elective courses. Core courses (identified below and in the course listings) are of two kinds: prescribed individual course requirements, and area distribution requirements in which students may choose from among a list of approved courses within the general prescribed academic area.

Alternatives to the Core curriculum, or deviations from it, must be approved by the Academic Standing Committee.

A detailed list of Core requirements and courses follows.

Core Area Requirements

Area	B.A. Hours	B.S. Hours	A.S. Hours	
Literature	6	6		Complete English 105 and one other course from among the English, French, Spanish, or German literature courses listed below. Note: courses in composition, literary criticism, or the teaching of English do not fulfill the literature Core requirement.
			3	Complete English 105.
Modern Language	6	6*		Each student for the bachelor of arts degree must complete six credits of intermediate language or demonstrate competency equal to intermediate college language 202. Normally, students with two to three years of high school language will, through proficiency tests, place directly into 201–202, thereby fulfilling the Core requirement; such students will not receive credit for beginning language 101–102, should they decide to take it. However, students with a poor high school language background who do not place directly into intermediate language must take, and upon the recommendation of the instructor will receive credit for, 101–102. Such students must still take 201–202 to meet the Core modern language requirement.
				*Some majors do require a language for a bachelor of science degree; students should check the program description in this catalog.
Fine Arts	3	3	3	Complete three hours in any of the art, communication arts, and music courses listed below.
Religion and Philosophy	6	6	3	Complete the required hours in any of the philosophy and religion courses listed below.
History	6	6		Complete History 105 and one other history course from among the history courses listed below.
			3	Complete History 105.
Social Science	9	9		Complete the required hours in any of the economics, political science, psychology, anthropology, and sociology courses listed below.
			6	Complete Sociology 101 and Psychology 105.
Mathematics	3	6		Complete the required credit hours from among the mathematics courses listed below. Note: many mathematics courses require prerequisite lower-level mathematics courses; Mathematics 011 does not fulfill the mathematics Core requirement.
Science	8	8		Complete the required credit hours from among the biology, chemistry, physics, and earth science courses listed below, taking two courses in one science, or one course in physics and one in earth science. Students must take the associated laboratory if the course is to count for Core. Note: many science courses require prerequisite lower-level science courses; geography courses do not fulfill the science Core requirement.

Area	B.A. Hours	B.S. Hours	A.S. Hours	
Science (continued)			8	Complete the required credit hours in either biology or chemistry.
Physical Education	4	4	2	Complete four activity courses, including at least one but not more than two aquatics activities, from among the courses listed below. Physical Education 270 counts as three hours towards graduation, but fulfills only one credit towards Core. Physical Education 150, 160, 260 will count for Core credit only once each. No more than six physical education credits may be counted toward the 128 for graduation. Course titles may not be repeated; no student who passes a swimming course may take the swimming proficiency test for credit.

Courses which fulfill the area requirements noted above follow.

Core Courses

Literature

English 213, 241, 242, 312, 313, 314, 317, 318, 320, 322, 323, 327, 328, 331, 332, 333, 337, 338, 339, 340, 341, 342, 352, 357.

Language 323, 481–490.

Fine Arts

Art 105, 211, 251, 324, 355, 371–380.

Communication Arts 151, 167, 252, 257, 268.

Music 101, 102, 105, 111, 120, 235, 415, 417, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 360, 361, 362, 365, 368, 369.

Religion and Philosophy

Religion 105, 115, 125, 201, 202, 221, 222, 230, 231, 310, 320, 330, 340, 370–379.

Philosophy 105, 115, 201, 212, 255, 310, 320, 340, 370–379.

History

History 201, 202, 205, 211, 212, 213, 214, 215, 216, 306, 313, 314, 317, 318, 323, 324, 327, 328, 330–339, 340–349, 370–379, 390, 403, 406, 480–489, 498–499.

Social Science

Anthropology 201, 202, 211, 307, 308, 360, 371–380, 481.

Economics 101, 102, 301, 302, 303, 304, 306, 307, 308, 309, 370–379, 480–489.

Political Science 105, 117, 118, 202, 205, 301, 303, 305, 308, 327, 342, 370–379, 381, 401, 412.

Psychology 105, 106, 213, 215, 221, 225, 235, 317, 322, 333, 334, 370–379, 401, 402, 413, 414, 425, 435, 471–472, 480–489, 491–492.

Sociology 101, 201, 212, 215, 220, 233, 237, 247, 305, 317, 330, 331, 332, 342, 344, 371–380, 481–491.

Mathematics

Mathematics 101, 117, 121, 122, 151, 172, 201, 211, 212, 222, 252, 301, 302, 321, 324, 341, 351, 352, 361, 362, 370–379, 421, 422, 441, 480–489.

Science

Biology 105–105L, 106–106L, 108–108L, 111, 112, 201, 202–202L, 212, 215–215L, 235, 313–313L, 321, 322–322L, 324–324L, 331, 332, 341, 342, 343, 347, 352, 370, 379, 380–389, 412, 480–489.

Chemistry 101, 102, 104, 201, 202, 305, 315, 325, 341, 343, 344, 351, 352, 451, 371–380, 402, 421, 491, 492.

Earth Science 105, 107, 108, 111, 112, 301, 370–379, 481–489.

Physics 111, 203, 204, 132, 231, 232, 305, 306, 343, 344, 345, 370–379, 403, 404, 407, 408, 481–489, 490.

Physical Education

Physical Education 105, 115, 125, 135, 145, 150, 155, 160, 165, 185, 195, 205, 210, 215, 217, 218, 225, 235, 240, 245, 250, 255, 260, 265, 290, 295, 370–380, 481–490.

PROGRAM VARIATIONS AND OPTIONS

In addition to the major programs indicated above, Elizabethtown College offers a number of alternative learning opportunities: off-campus study abroad and in joint programs at other academic institutions and affiliated clinical facilities, and in a number of special study programs which emphasize individual study and close work with a member of the faculty.

Off-Campus Study

Study Abroad

The College participates in programs offering study abroad in Germany, France, Spain, and England.

The six colleges associated with the Church of the Brethren cooperate in the Brethren Colleges Abroad (BCA) program, offering a junior year of study in Germany, France, or Spain. Students may study at Phillips-Universität, Marburg/Lahn, West Germany; at the University of Strasbourg, France; or at the University of Barcelona, Spain. A wide selection of courses is offered in the social sciences and the humanities. Students are given intensive language instruction prior to the opening of the university semesters.

To qualify for the BCA program, students bound for Germany must have completed the equivalent of the second year of German in college and have approximately a B average. Although most students bound for France or Spain must also have completed the equivalent of two college years of French and Spanish, outstanding students who have completed the first year will be accepted. Other qualifications include seriousness of purpose, good character, demonstrated potential for social adjustment, and a basic understanding of the United States and the host country. The credits earned abroad are transferred toward the degree at Elizabethtown. A faculty adviser is in residence in Europe during the year.

The program accommodates about 25 students at each university; Elizabethtown College has a quota of three or four for each. Interested students should confer with Dr. J. Kenneth Kreider, BCA Program Coordinator, and their major adviser.

As part of the BCA program the College offers a semester in England for early childhood, elementary, and secondary education majors. Students attend full-time at St. Mary's College, Cheltenham, England, where they enroll in a Seminar in British Culture and Education, and select an additional three or four courses. Credit for these courses is applied toward the degree at Elizabethtown College. First semester students depart in early September and return before Christmas; second semester students depart in late January and return in late May. For information contact Dr. Kreider.

Joint Institution Programs

In these programs students study at the College and at affiliated academic institutions or clinical facilities. There are three major programs with other academic institutions: pre-forestry with Duke University, pre-engineering with Pennsylvania State University, and pre-nursing with Georgetown University. Programs with other institutions are under consideration.

In the pre-forestry program the student spends three years at the College and an additional year in professional studies at Duke, at which time the College grants the bachelor of science degree; an additional year at Duke leads to a master's degree in forestry or environmental management. For further details see the interdisciplinary section of this catalog, page 93.

The pre-engineering major is a 3-2 program with Penn State University. After completing three years at Elizabethtown College, the student transfers to University Park, completes two years of work in an engineering field, and receives a bachelor of arts degree from Elizabethtown College and a bachelor of science degree from Penn State University. For further details see the description in the Physics Department listing of the catalog, page 80.

In the pre-nursing program the student spends two years at the College and an additional two years at Georgetown University, at the end of which time Georgetown grants the bachelor of science degree. For further information consult the description in the Biology Department listing of the catalog, page 43.

The College also offers a number of programs in which work at affiliated clinical facilities constitutes an important part of the student's education. In the music therapy, occupational therapy, social work, medical technology, and medical secretary programs, students combine work at the College with first-hand experience in hospitals, clinics, professional offices, and social work and therapy programs. For detailed descriptions see the listings under the Departments of Music, Occupational Therapy, Sociology/Anthropology/Social Work, Chemistry, and Business.

On-Campus Study

Special Study Programs

Elizabethtown College recognizes the advantages and the need of education and study outside the traditional classroom, and offers the following special study programs:

Independent Study shall be undertaken for the special investigation of a topic or for the benefit of the advanced student whose special academic requirements cannot be met by regular catalog offerings. It should not be used simply to assemble credits for graduation. To apply for an Independent Study one must make a preliminary definition of the topic or issue to be pursued, securing the permission of the faculty sponsor and the chairman of the department in which the Independent Study is undertaken. The faculty member or members sponsoring the Independent Study will be involved in planning and evaluating the project, but the student should be capable of independent work. Independent Study is not tied to the academic calendar, and a project may be begun or ended at any point. It is to be registered with the Registrar at the beginning of the semester during which it will be completed. Application forms for Independent Study are available at the Registrar's Office.

Directed Study is a second type of study available to matriculated students at Elizabethtown College. In contrast to independent study of a special topic, Directed Study will be undertaken for a regular catalog course which is not a part of the course offerings for the given semester. This method of study should be used by the student who needs rather frequent conferences with the professor.

A full-time student shall be charged two-thirds of the current part-time rate for the Directed Study in addition to his regular tuition. Part-time students shall be charged the current part-time rate for tuition plus a surcharge of two-thirds

the same rate. Full-time students whose load exceeds 18 hours shall be charged the current part-time rate for tuition plus the same surcharge for those hours in excess of 18.

Tutorials are available where remedial work is necessary for the student to profit from a classroom course. A tutorial involves more frequent meetings between professor and student than either Independent Study or Directed Study. Generally a faculty member will not teach more than one tutorial per semester.

Any student who enters into a tutorial agreement shall be charged at the rate of one and a half times the part-time rate over and above his regular tuition.

It is the responsibility of the student to locate a professor who is willing to enter into the tutorial agreement. The student shall register for these studies in the Registrar's Office.

DEVELOPMENTAL STUDIES

As part of Elizabethtown College's increasing efforts to make a college education available to a variety of students, the Developmental Studies Program is designed for the motivated student with academic potential, but with less-than-adequate education credentials (SAT scores, high school grades and/or rank).

The Developmental Studies Program has several thrusts. First, it offers academic courses in the fall semester geared to introducing the student to the rigors of college-level study. Second, the Program provides strong support services (academic advising, peer and professional tutoring, and group and peer counseling) to its students. Third, the Program offers instruction to aid in achieving basic competency in the mathematics, reading, and writing skills necessary for competing successfully in college-level courses. A maximum of ten credits can be earned in Developmental Studies courses, with these credits applying toward the graduation total but not to the core or major subject requirements. (To complete the student's schedule of twelve to fourteen semester hours, courses from areas such as physical education, history, sociology, religion, and psychology may be provided for the student.) Each entering freshman's academic course load is individually scheduled to provide the greatest opportunities for the student. Upon earning a 2.0 cumulative grade average for two consecutive semesters, the student exits from the Developmental Studies Program and declares a major subject area.

The following courses comprise the Program's offerings:

DS 001 Human Potential Seminar

1 credit. This small, structured group experience helps persons understand and share extensive positive information about themselves. The seminars are experiential rather than lecture-oriented. Through such experiences of mutual and self-affirmation, the participants come to a greater awareness of, and respect for, their own and others' potentials. Specifically, the students list their values, satisfying experiences, personal strengths, and long-term goals. Graded pass/no pass.

DS 011 Intermediate Algebra (Mathematics 011)

2 credits. The course deals with the study of the fundamental algebraic and computational skills used in certain science courses and prerequisite to Mathematics 101 and 117. Letter graded.

DS 021 Basic English (English 021)

2 credits. The course emphasizes the basic skills of writing (grammar, usage, mechanics) with primary application in paragraph writing. Graded pass/no pass.

DS 031 Reading Laboratory

1 credit. Individualized instruction in reading improvement and related study skills is provided in a laboratory setting. Textbooks and a variety of materials enable students to build a foundation in theories and techniques of effective reading on which to build a system of study adapted to individual needs. Graded pass/no pass.

DS 041 Techniques for Academic Success Seminar

1 credit. The TAS Seminar is an introduction to the physiological and psychological approaches to learning. This seminar includes an assessment and development of listening skills, study techniques, academic motivation, time management, priority setting, critical thinking, textbook analysis, and other topics. Graded pass/no pass.

DS 105 Verbal Communication

3 credits. The communication process through spoken and non-oral expression is explored through discussion, problem-solving, role-playing, written assignments, lecture, speech preparation and delivery. The course also deals with communication blocks (fear, anxiety, and misunderstanding). Letter graded.

CONTINUING EDUCATION

Elizabethtown College regards the training and education of adults as integral to its academic program. To reflect that commitment, the College offers study options that allow students to complete bachelor of arts and bachelor of science degree requirements through evening and Saturday study. Additionally, certificate programs for persons who are beginning college work, and diploma programs for college graduates are available both on and off campus at times convenient to working adults.

Individuals may also earn Elizabethtown College degrees through study at the University Center in Harrisburg, a consortium comprising Elizabethtown College, Levanon Valley College, the University of Pennsylvania, Temple University, and The Pennsylvania State University.

In addition to these traditional learning options, the College offers an external degree program in which adults work with faculty advisers to develop individualized plans of study leading to associate, bachelor of professional studies, or bachelor of liberal studies degrees. Credit earned through traditional classroom education, special studies, and testing is combined with learning achieved through life and work experience to meet external degree requirements. As a service to adults working in business, industry, and health care, the College also sponsors a number of non-credit seminars and workshops.

For detailed information on continuing education programs at Elizabethtown College contact the Center for Continuing Education, Nicarry Hall, Elizabethtown College.

Course Descriptions



Course Descriptions

Following, arranged alphabetically by departments or programs, are the courses offered by the College. For each department, there is first a section treating the programs offered. This is followed by a second section which discusses the required courses in each program or concentration.

Some departments offer majors or concentrations in more than one academic discipline. For convenience, these academic disciplines are listed alphabetically in the text, and the reader is there referred to the appropriate department.

ACCOUNTING

See Department of Business, page 46.

ANTHROPOLOGY

See Department of Sociology-Anthropology-Social Work, page 89.

DEPARTMENT OF ART

Professor Henry M. Libhart (*Chairman*)

The academic and the practical courses in the art program aim to help students refine their creative potential and expand their judgment of the visual arts. Studio courses in two-dimensional media are offered, but physical limitations necessitate permission of the Department for any student to enroll in a studio course. There are no prerequisites for any of the art courses at the College.

105 Drawing

3 credits. (Core) Studio practice in basic drawing media for sketching and rendering both live and inanimate subjects.

211 Color and Design

3 credits. (Core) Studio easel painting in opaque media with stress on pictorial organization and application of color theories.

251 Printmaking

3 credits. (Core) Experience in silk-screen operations and the several methods of relief and intaglio plates, and instruction in the use of the printer's machinery.

324 American Arts and Crafts

3 credits. (Core) Comprehensive scan of U.S. arts, observing their derivation from social, ethnic, and aesthetic influences.

355 Introduction to Art

3 credits. (Core) Experience with selected works by major and minor artists of the modern epoch, as a means of recognizing and evaluating artistic style.

371-380 Seminars in Fine Arts

Variable credit. (Core) Offered as occasion justifies.

DEPARTMENT OF BIOLOGY

Professors Heckman, Pepper
Associate Professors Dively, Hoffman,
Laughlin (*Chairman*), Polanowski

Bachelor of Science

The courses of the Department of Biology have been designed to provide a foundation in basic concepts and principles involving the structural, functional, and environmental aspects of the living world. The Department seeks to provide the liberal arts student with a choice of courses emphasizing biological theories which provide a broad and unifying understanding of nature's life forms and man.

The curriculum for a Bachelor of Science in Biology is designed for optimal individualized scientific preparation for success in graduate school, professional schools of medicine, and allied fields, as well as for the student desiring immediate entry into biologically oriented employment opportunities.

The Department makes a special effort to involve students in research projects with professors, and senior seminar and independent studies.

The Department of Biology offers five concentration options:

The biology major option prepares the student for a biologically related profession or for graduate school. The specific requirements are Biology 111, 112, 215, 215L, 212, 313, 313L, 412, and 12 additional hours in biology, including one course selected from 321, 322–322L, or 324–324L, one course selected from 235, 331, or 332, and one course selected from 347, 341, 342, or 343. Other course requirements are Chemistry 101, 102, 201, 202; Physics 203, 204; Mathematics 101, 121 or 117, 172 or 151; and a foreign language through the 202-level, or through 102 plus Computer Science 125.

The biology medical option prepares the student for entry into professional schools of medicine or related fields. The specific requirements are the same as those for the biology major except that students should select Biology 235, 343, 341, or 342 instead of 331, 332, or 347.

The secondary education certification option prepares the student for the receipt of Pennsylvania Secondary Education Certification within the framework of the *Biology major option* (see above). This option is designed to provide a strong background in the sciences while simultaneously fulfilling the requirements for secondary teaching certification. The specific requirements are Biology 111, 112, 215, 215L, 212, 313, 313L, and one course selected

from among 321, 322–322L, or 324–324L, and 9 additional hours in biology. Other course requirements are Chemistry 101, 102, 201, 202; Physics 203, 204; Mathematics 101, 121, or 117, 172 or 151; Psychology 105; Education 305, 225d, 415, 225e, and 473. Persons interested in this concentration should consult with Dr. Hoffman.

The secondary general science certification option enables the student to receive secondary school general science certification. Students interested in this area should consult the detailed description in the interdisciplinary section of this catalog, page 93. Further information may be obtained from Dr. Hoffman.

The biology pre-forestry option offers a biology concentration in the five-year cooperative program in forestry and environmental management with Duke University, leading to a bachelor of science degree from Elizabethtown College and a master of forestry or master of environmental management degree from Duke University. Students interested in this option should see the detailed description in the interdisciplinary section of this catalog, page 93. Further information may be obtained from Mr. Laughlin.

The biology pre-nursing option offers a biology program with Georgetown University leading to an accredited bachelor of science degree in nursing. In this program the student spends the first two years at Elizabethtown College and transfers to Georgetown University for the junior and senior years. The degree is conferred by Georgetown University.

Admission to the School of Nursing at Georgetown requires a cumulative grade point average of 3.0 in the pre-nursing program at Elizabethtown and the recommendation of the Department of Biology. Students having less than a 3.0 cumulative grade point average will be considered on an individual basis with two recommendations from Elizabethtown College.

Pre-nursing students should take Biology 111, 201, 202–202L, 235; Chemistry 101, 104; Mathematics 151; Psychology 105, 225, 322; Sociology 101; 6 credits in English including 3 credits of composition; 6 credits of philosophy and ethics; 6 credits of religion; 7 elective credits. Students transferring to Georgetown may be required to take a four-week nursing program in August prior to matriculation at Georgetown. Further information may be obtained from Mr. Heckman.

105 Principles of Biological Science

3 credits. (Core) Designed for the non-biology major. An overview of basic biological principles and concepts, emphasizing their relevancy to our daily lives. Discussion of current issues and problems in an attempt to provide an understanding and respect for the basic mechanisms of life. *Co-requisite (to satisfy Core) Biology 105L (but cannot be taken for credit after completing Biology 111).*

105L Principles of Biology Science Laboratory

1 credit. (Core) Designed to accompany Biology 105, these laboratory exercises demonstrate many of the important biological principles covered in the lecture course. *Prerequisite or corequisite Biology 105.*

106 Genetics, Evolution, and Man

3 credits. (Core) Designed for the non-biology major. A discussion of the fundamentals of genetics as they relate to man, followed by a study of the mechanics of evolution, their significance, and the evolution of man. *Corequisite (to satisfy Core) Biology 106L.* Spring, alternate years.

106L Genetics, Evolution, and Man Laboratory

1 credit. (Core) A series of laboratory exercises intended to illustrate some of the principles of genetics and mechanisms of evolution. *Prerequisite or corequisite Biology 106.* Spring alternate years.

108 Man and His Environment

3 credits. (Core) Designed for the non-biology major. Discussion of basic principles of environmental interrelationships, and a consideration of specific problem areas such as pollution, radiation, and population growth with regard to those principles. *Corequisite (to satisfy Core) Biology 108L.* Spring semester.

108L Man and His Environment Laboratory

1 credit. (Core) Includes field trips to water and sewage treatment plants, testing for various contaminants in the environment, and exercises in measurement of consumption and planning. *Prerequisite or corequisite Biology 108.* Spring semester.

111 General Biology

4 credits. (Core) The study of the chemical and cellular basis of life, animal anatomy and physiology, cellular reproduction, heredity, and animal development. This course is designed for biology majors and those students taking additional biology courses beyond Biology 112. Hours: lecture 3, laboratory 3. Fall semester. *Cannot be taken for credit after completing Biology 105 without permission of instructor.*

112 General Biology

4 credits. (Core) The study of the evolution, diversity, and ecology of organisms, the animal kingdom, photosynthesis, plant anatomy and physiology, viruses, monera, and the plant kingdom. This course is designed for biology majors and those taking additional biology courses. Hours: lecture 3, laboratory 3. *Prerequisite Biology 111.* Spring semester.

201 Human Anatomy

4 credits. (Core) A study of human structure at the tissue, organ, and system levels. Particular attention given to the correlation of structure to normal and abnormal function. Laboratory work involves dissection of human cadavers and a cat. Student enrollment limited to occupational therapy, nursing, and medical technology majors. Hours: lecture 2, laboratory 4. *Prerequisite Biology 111, permission of instructor.* Fall semester.

202 Human Physiology

3 credits. (Core) A functional study of cells, tissues, organs, and organ systems of man; emphasis on disorders as they relate to the understanding of normal function. Enrollment limited to occupational therapy, nursing, and medical technology majors. *Prerequisite Biology 111, permission of instructor.*

202L Human Physiology Laboratory

1 credit. (Core) A study of selected cardiovascular, respiratory, renal, muscular, neural, and endocrine control mechanisms; emphasis on "hands on" manipulation of instruments useful to the health profession student. *Prerequisite or corequisite Biology 202.* Spring semester.

212 Molecular Biology

3 credits. (Core) An integrated and comprehensive review of recent biological developments at the molecular level. Information, drawn from a wide variety of biological disciplines, concerning the interaction of biological molecules. *Prerequisite Biology 112 or permission of instructor.* Spring semester.

215 Genetics

3 credits. (Core) A study of classical and neo-Mendelian principles of heredity. *Prerequisite eight hours of biology or permission of instructor.*

215L Genetics Laboratory

1 credit. (Core) Techniques of genetic experimentation. *Prerequisite or corequisite Biology 215.*

235 General Microbiology

4 credits. (Core) A study of the morphological, physiological, cultural, and ecological characteristics of bacteria, including immunological principles. A laboratory gives practice in the isolation and identification of bacteria. Hours: lecture 2, laboratory 5. *Prerequisite Biology 112, Chemistry 102 or 104, or permission of instructor.*

313 General Ecology

3 credits. (Core) The relationships between plants, animals, and their environment are investigated with regard to energy flow, mineral cycling, physical and chemical parameters, population changes, and community structure. *Prerequisite* 16 hours of biology or permission of instructor. Fall semester.

313L General Ecology Laboratory

1 credit. (Core) Use of techniques and instrumentation for aquatic and terrestrial field studies, experimentation in such areas as animal behavior, population growth, competition, productivity, and mineral cycling. *Prerequisite or corequisite* Biology 313. Fall semester.

321 Plant Physiology

4 credits. (Core) A study of plant growth and development, including a discussion of photosynthesis, mineral nutrition, carbon and nitrogen metabolism, water relations, and plant hormones. Hours: lecture 3, laboratory 4. *Prerequisite* Biology 331, and Chemistry 102 or 104; or permission of instructor. Fall semester.

322 Cell Biology

2 credits. (Core) A morphological and physiological study of cells and cell mechanisms. Metabolic activities are studied and associated with cell organelles. *Prerequisite* Biology 112, Chemistry 202. Spring, alternate years.

322L Cell Biology Laboratory

2 credits. (Core) A qualitative and quantitative study of cellular chemical construction and enzymatic pathways through various extraction and analysis techniques. *Prerequisite or corequisite* Biology 322, Spring, alternate years.

324 General Physiology

3 credits. (Core) A functional study of vertebrate organs and organ systems. Attention focused on similarities and specialization in relation to function, with emphasis on functional adaptations to the environment. *Prerequisite* Biology 112, or permission of instructor. Spring semester.

324L General Physiology Laboratory

1 credit. (Core) An investigation of selected physiological mechanisms, employing spectrophotometers, datagraphs, spirometers, oscilloscopes, electrocardiographs, electrophoresis, and animal surgical techniques. *Prerequisite or corequisite* Biology 324. Spring semester.

331 Comparative Plant Morphology

4 credits. (Core) A comparative study of the plant kingdom with emphasis upon the various levels of organization, structure, and the development and relationships of the major plant groups. Hours: lecture 3, laboratory 4. *Prerequisite* Biology 112 or 105. Fall, alternate years.

332 Taxonomy of Vascular Plants

4 credits. (Core) Examination of family characteristics useful in plant identification, using live material and transparencies. Taxonomic principles and distribution of plants discussed. Plant collection and some Saturday trips required. Hours: lecture 3, laboratory 4. *Prerequisite* Biology 112 or 105. Spring, alternate years.

341 Comparative Anatomy

4 credits. (Core) A comparative and embryological study of morphology of selected representatives from the phylum chordata. Laboratory work involves dissection and demonstration of organisms from major chordate groups. Hours: lecture 2, laboratory 4. *Prerequisite* Biology 112. Fall semester.

342 Developmental Biology

4 credits. (Core) A survey of biological development covering the molecular, cellular, and organismic levels with special emphasis on control mechanisms. The laboratory emphasizes vertebrate animal development. Hours: lecture 2, laboratory 4. *Prerequisite* Biology 215. Spring semester.

343 Histology and Bio-Medical Technique

4 credits. (Core) A basic microscopic study of vertebrate tissues. The laboratory includes biomedical techniques of paraffin sectioning, staining, and slide preparation. Hours: lecture 2, laboratory 4. *Prerequisite* Biology 112. Fall semester.

347 Invertebrate Zoology

4 credits. (Core) A study of the evolution of invertebrate animals from simple to complex forms, structural and functional similarities and differences, and the evolutionary trends necessary for an understanding of basic adaptive features. Hours: lecture 2, laboratory 5. *Prerequisite* Biology 112 or permission of instructor. Fall, alternate years.

352 Applied Microbiology

4 credits. (Core) A study of microorganisms as they relate to their natural environment, food processing and contamination, and to public health. Hours: lecture 2, laboratory 5. *Prerequisite* Biology 235, Chemistry 201. Spring, alternate years.

370-379 Special Topics in Biology

Variable credit. (Core) Courses of a specialized nature reflecting the interests of the instructor. Courses offered on a random basis.

380-389 Directed Study in Biology Topics

Variable credit. (Core) Directed study in biological areas in which the student meets regularly with the instructor on an individual basis. Laboratory work may include self-directing aids. *Prerequisite* permission of instructor.

412 Seminar in Biology

1 credit. (Core) Students will present laboratory or literature research to faculty and peers. Topics will vary from year to year. *Prerequisite* 18 hours in biology. Spring semester.

480-489 Independent Problems in Biology

Variable credit. (Core) Designed to allow the student to do independent research in some phase of biology. *Prerequisite* 16 credits in biology, permission of instructor and Department Chairman.

Education 305 Practicum in Secondary Education: Science

4 credits. Teaching science in secondary schools. *Prerequisite* Psychology 105; *corequisite* Education 225d.

DEPARTMENT OF BUSINESS

Professor Bitting

Associate Professors Buffenmyer (*Chairman*), Eppley, Evans, Gliptis, C. Kreider, Neyer, Pomroy

Assistant Professors S. Dolan (*Associate Chairman*), Hoppie, Mottilla, Muston, Trostle
Instructors Griswold, Weaver
Bachelor of Arts; Bachelor of Science;
Associate of Science

The primary objective of the Department of Business is to provide comprehensive programs of professional education for young men and women who wish to achieve responsible positions in private and public business organizations and in academic institutions. These programs are based strongly on the tradition of a liberal arts education. Their general objectives are to prepare contemporary and future leaders, to develop a broad understanding of the nature of business and its role in society, to enlarge the students' competence in the qualities for success in the business world, and to provide the foundation for graduate study, continuing self-education, and personal development.

The Department of Business offers five programs:

Bachelor of Science in Accounting. Preparation for entrance into the profession of accounting (public, private, or governmental) requires a basic business core in addition to a proficiency in accounting. Because of the increased emphasis upon computer and quantitative techniques by business, students are urged to elect additional courses in these areas.

Bachelor of Science in Business Administration. Preparation to become tomorrow's business leader requires a broad background in business, a knowledge of the behavioral and social sciences, and the ability to use quantitative techniques in solving problems. This background and these basic tools will emerge from the business core, the General Education Core, and specific mathematics requirements. A student will gain further understanding of specific areas of business by concentrating in one or more of five areas: *accounting, computer science/business information systems, economics, management, or marketing*. A student may also select a secondary area of concentration in *communications, international business, or health science*.

Business administration offers a concentration

in the forestry and environmental major. Students interested in this major should consult the detailed description in the interdisciplinary section of this catalog, page 93.

A bachelor of science degree in accounting or business administration may be earned in the evening program of the College. For further information see the special Evening Session bulletin.

Bachelor of Science in Business Education.

For students who plan to teach in the business department of a secondary school the business education curriculum provides a liberal training in courses outside the field of business, a broad background in business, depth in at least two certification areas in business, and professional education. The professional training will be conducted by personnel who have been secondary business teachers and who maintain an awareness of current developments through close relationships with business departments in area high schools and vocational-technical schools.

Bachelor of Arts or Science in Economics.

Preparation for a career in economics requires a broad background in basic economic theory coupled with an in-depth study of the quantitative tools so important to today's economist. The economics curriculum is designed to provide the student with this breadth and depth. In light of the increasing emphasis on the quantitative approach to economic theory, students are advised to select courses in mathematics and computer science beyond those specifically required in the economics curriculum.

Economics is one of the major areas in the social studies major preparing a student for certification to teach in secondary schools. Students with interests in this area should consult the detailed descriptions in the interdisciplinary section of this catalog, page 93.

Associate of Science in Medical Secretarial Science.

This two-year program prepares students for employment in a medical office, a dental office, a hospital, or other health care facility. The curriculum includes a liberal arts core along with pertinent secretarial skills and a series of medical secretarial courses. The program is designed to provide the student with a foundation in the behavioral and social sciences, the liberal and fine arts, as well as specific training for the medical secretary profession.

mester hours in accounting; Business Administration 215, 248, 265, 325, 331, 332; Computer Science 125; Economics 101, 102; Mathematics 117 or 121, and 151.

BUSINESS ADMINISTRATION

A major in business administration includes Accounting 107, 108, (or 105, 106); Business Administration 215, 248, 265, 325, 331, 332; Computer Science 125; Economics 101, 102; Mathematics 117 or 121, and 151. Each student must also choose one of the concentrations described below; twelve semester hours beyond those listed above must be taken in the concentration area (nine of those 12 hours must be taken on the Elizabethtown College campus). A student may also elect a secondary concentration.

For an ***Accounting Concentration*** Accounting 205, 206, 305, 306 are recommended. A ***Computer Science/Business Information Systems Concentration*** requires Computer Science 135, 309, 340 and one other three-credit course in computer science. An ***Economics Concentration*** requires Economics 301, 302, and two other economics courses. The ***Management Concentration*** requires Business Administration 369, 499, and two other management courses from the department advising sheet. A ***Marketing Concentration*** requires Business Administration 311, 498, and two other marketing courses.

A ***Secondary Concentration in International Business*** requires an intermediate level of competency in foreign language, Anthropology 311, Political Science 205, Economics 307, and two other courses from the departmental advising sheet. A ***Secondary Concentration in Health Science*** requires four additional courses from biology and/or chemistry according to the departmental advising sheet. A ***Secondary Concentration in Communications*** requires Business Administration 355, Communication Arts 105, English 383, and two other courses from the departmental advising sheet.

BUSINESS EDUCATION

A major in business education includes Accounting 105, 106; Business Administration 215, 331, 332; Business Education 111, 421; Computer Science 125; Economics 101, 102; Mathematics 151; Psychology 105; and the professional education program for secondary certification: Education 415, 225d, 225e; Business Education 305, 472 (Education 305, 473). Each student must also choose two or more of the following certification areas: accounting, computer science, marketing, secretarial, type-writing. Speech proficiency is also required.

ECONOMICS

A major in economics includes Economics 101, 102, 301, 302, 309, 15 additional semester hours in economics; Business Administration 248; Computer Science 125; Mathematics 151 and 121; nine semester hours of history; and nine semester hours of political science, or sociology, or both.

ACCOUNTING

A major in accounting includes Accounting 105, 106 (or 107, 108), 205, 206, 305, 306, 12 additional se-

MEDICAL SECRETARIAL SCIENCE

The requirements for the associate degree in medical secretarial science include Business Education 212, 221, 223; Medical Secretary 101, 109, 211, 219, 272; a year of biology or chemistry; Communication Arts 105; English 105; History 105; Sociology 101; Psychology 105; two semester hours in physical education; and three semester hours each in fine arts and religion/philosophy. A 2.0 quality point average in the major (business education and medical secretary courses) is required prior to Medical Secretary 272.

ACCOUNTING

Note: Students who complete Accounting 105 may *not* enroll in Accounting 107 or 108 unless the Department of Business specifically allows them to do so. Likewise, students who complete 107 may *not* enroll in 105 or 106. The proper course sequence is either 105–106, or 107–108.

105 Principles of Accounting I

3 credits. An introductory course for students who intend to continue in accounting courses. The accounting cycle, financial statements, and assets. Fall semester

106 Principles of Accounting II

3 credits. A continuation of 105. Liabilities, equity accounts, ratio analysis, and introduction to cost accounting. *Prerequisite Accounting 105.* Spring semester.

107 Financial Accounting

3 credits. An introductory course designed to acquaint the student with basic accounting methodology and the structure and interpretation of financial statements used in external reporting. Fall semester.

108 Managerial Accounting

3 credits. A study of the use of information gathered from accounting records and other information sources to prepare internal reports and analyses in order to assist management in control and decision-making. *Prerequisite Accounting 107.* Spring semester.

205 Intermediate Accounting I

3 credits. A thorough study of various accounting concepts and generally accepted accounting principles; the application of these principles to the various assets and related revenue and expense accounts as presented in the income statement and balance sheet. Emphasis on valuation, classification, disclosure, and cut-off. *Prerequisite Accounting 106 or permission of instructor.* Fall semester.

206 Intermediate Accounting II

3 credits. A continuation of 205. The principles of valuation, classification, disclosure, and cut-off applied to the various liability and owners' equity accounts as well as their related revenues and expenses. Topics include the study of various items affecting income determination, the statement of changes in financial position, and ratio analysis. *Prerequisite Accounting 205.* Spring semester.

301 Introduction to Federal Income Taxes

3 credits. A study of those provisions of the Internal Revenue Code which apply to individual taxpayers and sole proprietors. Students without a business background are encouraged to enroll. Fall semester.

302 Advanced Tax Accounting

3 credits. Further study of the Internal Revenue Code as it relates to partnerships, corporations, trusts and estates, and exempt organizations. State taxation of business is also covered. *Prerequisite Accounting 301.* Spring semester.

305 Cost Accounting

3 credits. The quantitative aspects of managerial cost accounting, including cost-volume-profit analysis, budgeting, standard costs, and the concept of relevant costs. *Prerequisite Accounting 106 or 108; or permission of instructor.* Fall semester.

306 Advanced Cost Accounting

3 credits. A continuation of the managerial emphasis on cost accounting, including capital budgeting, inventory control, joint-and-by-product costing, and process cost accounting. *Prerequisite Accounting 305.* Spring semester.

308 Accounting for Non-profit Organizations

3 credits. An in-depth study of the principles and uses of fund accounting; includes the budgeting process, reporting requirements for general and special financial statements, and management's uses for control and decision-making as they relate to the general operating fund, as well as restricted and nonrestricted special funds. *Prerequisite Accounting 106 or 108.* Spring semester.

370–379 Special Problems

3 credits. A course designed to allow students to explore topics and problems of current relevance in accounting.

405 Auditing

3 credits. The legal and ethical responsibilities of an auditor, the methods and procedures used in gathering evidential material, and the auditor's report. *Prerequisite* Accounting 206. Fall semester.

406 Advanced Accounting

3 credits. A detailed study of accounting theory, income statement presentation, consolidations, partnerships, and foreign exchange accounting. *Prerequisite* Accounting 206. Fall semester.

409 Contemporary Problems for C.P.A.'s

3 credits. A capstone course in accounting designed to assimilate the widely varying aspects of public accounting and update the student in the latest standards and problems. *Prerequisite* Accounting 302, 405, 406; or permission of instructor. Spring semester.

471 Internship in Accounting

Variable credit. A series of work experiences in accounting with either a public accounting firm, a business firm, or governmental agency. *Prerequisite approval of Department Chairman.*

480-489 Independent Study

Variable credit. Designed to allow the student to do independent study and research on a problem or topic in the field of accounting. *Prerequisite approval of Department Chairman and Dean of the Faculty.*

499 Seminar in Accounting

3 credits. A study of selected topics currently under discussion in the accounting field. A major research project will be required. Offered upon student demand and faculty availability. *Prerequisite permission of instructor.*

BUSINESS ADMINISTRATION**215 Principles of Marketing**

3 credits. A study of the development and implementation of marketing strategies and practices with particular emphasis on the role of marketing in business and society. *Prerequisite or co-requisite* Economics 102.

248 Quantitative Techniques for Business

3 credits. Designed to develop familiarity with statistical and mathematical methods applicable to business; includes Bernoulli and Bayesian probability, decision theory, inventory models, linear programming, queuing theory, and network models. *Prerequisite* Mathematics 151, 117.

265 Principles of Management

3 credits. A study of the process of using and coordinating technical and human resources in planning, organizing, staffing, motivating, and controlling to achieve an organization's objectives.

311 Principles of Marketing Research

3 credits. Employs scientific research methodology to solve marketing problems. Covers research design, data collection, sampling, and analysis. Stresses writing meaningful reports for management use. *Prerequisite* Business Administration 215, Mathematics 151. Fall semester.

312 Principles of Advertising

3 credits. Involves the creative and business management aspects of advertising, including campaign strategy, mass media, the advertising agency, creative techniques, advertising research, and social accountability. *Prerequisite* Business Administration 215 or permission of instructor. Spring semester.

313 Retailing Management

3 credits. A study of retailing institutions including institutional location, layout, managerial objectives and policies, consumer behavior, pricing and promotional strategies, consumer services, and expected trends. *Prerequisite* Business Administration 215, 265. Fall semester.

316 Marketing Management

3 credits. The formulation of overall marketing policies and the planning techniques for embodying these policies in marketing programs. Case analysis is stressed. *Prerequisite* Business Administration 215, 248, 265.

325 Business Finance

3 credits. Analyzes the management of funds of a business, including long and short-term sources of funds, ratio analysis, capital budgeting, the cost of capital, and the dividend decision. *Prerequisite* Accounting 106 or 108.

331 Business Law I

3 credits. Legal principles applicable to business with emphasis on contract law. Includes the growth of law as an institution. Fall semester.

332 Business Law II

3 credits. The study of legal principles applicable to business with emphasis on partnership, corporation, and property law. *Prerequisite* Business Administration 331 or permission of instructor. Spring semester.

333 Legal Problems in Business

3 credits. An examination of statutes, problems, and issues in selected areas of the law with attention to personal property, bailments, commercial paper, sales, and insurance. *Prerequisite permission of instructor.* Spring, 1983.

355 Managerial Communications

3 credits. A study of the various communications techniques for management and business. Emphasis on analysis and writing of business letters; report development, writing and presentation; and the organization of materials for effective oral and written presentations. *Prerequisite permission of instructor.* Fall semester.

369 Behavioral Theory in Management

3 credits. A detailed examination of basic motivational theories, of behavioral models based on these theories, and the practical application of these models. *Prerequisite Psychology 105, Business Administration 265.* Fall semester.

370-379 Special Problems

3 credits. A course designed to allow students to explore topics and problems of current relevance in business.

424 Investments

3 credits. Emphasis on various classes of investments available to the investor; sources and uses of investment information, and security and markets evaluation. *Prerequisite Business Administration 325.* Spring semester.

466 Operations Management

3 credits. A critical study of decision-making techniques, emphasizing the practical application of scientific methods to production activities; topics include resource allocation, production cycle, work simplification, plant layout, and process control. *Prerequisite Business Administration 248, 369, Economics 102.* Spring semester.

467 Personnel Administration

3 credits. Analysis of the principles, concepts and practices of procurement, development, maintenance, and utilization of personnel in organizations. *Prerequisite Business Administration 265.* Spring semester.

468 Industrial and Labor Relations

3 credits. Analysis of employment relationships; union philosophy, structure and function; collective bargaining, and the interrelated interests of management, union, workers, and the community. *Prerequisite Business Administration 369 or permission of instructor.* Fall semester.

471 Internship in Business

Variable credit. Work experiences designed to

supplement course work. Students gain valuable knowledge and experience not available from textbooks. *Prerequisite approval of Department Chairman.*

480-489 Independent Study

Variable credit. Designed to allow the student to do independent study and research on a problem or topic in the field of business. *Prerequisite approval of Department Chairman and Dean of the Faculty.*

495 Business Policy

3 credits. A capstone course for any business major, integrating concepts, principles, and practices from prior courses. Provides a comprehensive study of the interrelationships between management theory, problem analysis, and strategy formation for the contemporary enterprise.

498 Seminar in Marketing

3 credits. Synthesizes the literature in consumer behavior, quantitative methods in marketing, and policy issues. *Prerequisite Business Administration 215 and permission of instructor.* Spring semester.

499 Seminar in Management

3 credits. Advanced study focusing on current management concepts and contemporary problems in the business enterprise. Various topics will be selected in the area of the students' interest. *Prerequisite Business Administration 248, 265, 369, and two other courses required for the management concentration; or permission of instructor.*

BUSINESS EDUCATION**101 Elementary Gregg Shorthand**

3 credits. Introduction to Gregg Shorthand; instruction in theory, and in reading and writing shorthand rapidly and accurately. For students with no training in shorthand. Fall semester.

201 Intermediate Gregg Shorthand

3 credits. An intensive study of Gregg Shorthand; emphasis upon developing the student's ability to take dictation on unfamiliar material rapidly, and to transcribe accurately at the typewriter. *Prerequisite Business Education 101, 111; or permission of instructor.* Spring semester.

301 Advanced Gregg Shorthand

3 credits. A thorough review of shorthand theory, dictation and transcription practices. Emphasis given to methods and materials used in teaching shorthand in the secondary school. Enrollment limited to business education students. *Prerequisite Business Education 201, 212; or permission of instructor.* Fall semester.

111 Elementary Typewriting

3 credits. Fundamental typewriting techniques: machine operation, keyboard technique, letter forms, tabulation, manuscript form. For students with no formal training on the typewriter. Fall semester.

212 Intermediate Typewriting

3 credits. A concentrated training on the typewriter; business letters, special communication forms, technical papers, business reports, tables, business forms, executive communications, and application forms. *Prerequisite Business Education 111 or permission of instructor.* Spring semester.

311 Advanced Typewriting

3 credits. The building of production-level skill with emphasis given to methods and materials used in teaching typewriting in the secondary school. Enrollment limited to business education students. *Prerequisite Business Education 212 or permission of instructor.* Fall semester.

221 Mathematics for Business

3 credits. Review of fundamental processes, with emphasis on accuracy and speed in computations. These skills are applied to problem solving in personal and business situations. Enrollment limited to business education and medical secretarial students. Spring semester.

223 Business Communications

3 credits. Effective and functional written and oral business communications. Enrollment limited to business education and medical secretarial students. Fall semester.

370-379 Special Problems

3 credits. A directed learning experience designed to allow students to explore current topics of special relevance in the field of business education.

421 Office Practice

3 credits. The study of methods and materials for teaching secretarial procedures and business machines. Enrollment limited to business education students. *Prerequisite Business Education 111 or permission of instructor.* Spring semester.

305 Practicum in Secondary Education: Business (Education 305)

4 credits. Instructional methodology of business education and in-school experience integrated under the guidance of a clinical professor representing the academic major. *Prerequisite Psychology 105; corequisite Education 225d.*

472 Professional Internship, Secondary (Education 473)

16 credits. Student teaching in a secondary classroom. *Prerequisite Education 305.*

480-489 Independent Study

Variable credit. Designed to allow the student to do independent study and research on a problem or topic in the field of business education. *Prerequisite approval of Department Chairman and the Dean of the Faculty.*

ECONOMICS**101 Principles of Economics I**

3 credits. (Core) The principles and problems of economics. Topics include supply and demand, the United States economic system, national income accounting, employment theory, fiscal policy, money and banking, and monetary policy. Does not fulfill Core requirement for students majoring in accounting, business administration or business education.

102 Principles of Economics II

3 credits. (Core) Continuation of 101. Topics include elasticity, consumer behavior, production costs, market structures (competition, oligopoly, monopoly), and resource pricing. Does not fulfill Core requirement for students majoring in accounting, business administration, or business education. *Prerequisite Economics 101 or permission of instructor.*

301 Intermediate Microeconomic Theory

3 credits. (Core) An in-depth study of corporate decision-making and resource allocation within the economic environment of free enterprise. *Prerequisite Economics 101, 102; Mathematics 121 or 117.* Fall, 1981.

302 Intermediate Macroeconomic Theory

3 credits. (Core) Development of macroeconomic theories of output, employment, inflation and growth, monetary and fiscal policies, and analysis. *Prerequisite Economics 101, 102; Mathematics 121 or 117.*

303 Money and Banking

3 credits. (Core) A study of the United States money and banking systems, including commercial banking, the Federal Reserve System, monetary theory and policy, interest rates, money markets. *Prerequisite Economics 101, 102; or permission of instructor.* Spring semester.

304 Public Finance

3 credits. (Core) An application of macro-economic theory to the problems of federal, state, and local taxation, expenditures and debt management. *Prerequisite Economics 101*. Fall, 1982.

306 Development of Economic Thought

3 credits. (Core) The historical and philosophical evolution of economic ideas and schools of thought from Smith, Ricardo, and Marx to Marshall and Keynes. Fall, 1981.

307 International Economics

3 credits. (Core) A study of the basic concepts of international trade, international payments, and commercial policy, combining economic theory, policy, and practice. *Prerequisite Economics 101, 102; or permission of instructor*. Fall, 1982.

308 Comparative Economic Systems

3 credits. (Core) Examination, criticism, and appraisal of alternative economic systems: capitalism, socialism, communism, and mixed economic systems. *Prerequisite Economics 101 or permission of instructor*. Spring, 1982.

309 Introduction to Mathematical Economics

3 credits. (Core) An application of algebra and elementary calculus to further elaborate economic concepts and problems. *Prerequisite Economics 101, 102, Mathematics 121 or 117*. Fall, 1982.

370-379 Special Problems

3 credits. (Core) A course designed to allow students to explore topics and problems of current relevance in economics.

480-489 Independent Study

Variable credit. (Core) Designed to allow the student to do independent study and research on a problem or topic in the field of economics. *Prerequisite approval of Department Chairman and Dean of the Faculty*.

HEALTH CARE**322 Health Laws, Issues, and Public Policies**

3 credits. An examination of important laws, issues, and public policies pertinent to health care, with attention to regulatory authority, liability and social policy. *Prerequisite permission of instructor*. Spring, 1982.

MEDICAL SECRETARIAL SCIENCE**101 Medical Office Procedures**

3 credits. Simulation approach to medical office procedures, office protocol, and the like. Enrollment limited to medical secretarial students. *Prerequisite Business Education 111, 223; or permission of instructor*. Spring semester.

109 Medical Accounting

3 credits. Examines standard record-keeping and bookkeeping for doctors and dentists; topics include financial statements and reports unique to the medical profession. Enrollment limited to medical secretarial students. Fall semester.

211 Medical Terminology

3 credits. Basic tools for building a medical vocabulary through acquaintance with medical terms in anatomy, physiology, and disease. Enrollment limited to medical secretarial students. Fall semester.

219 Medical Transcription

3 credits. Using Dictaphone equipment, the students transcribe a variety of medical records and histories. Enrollment limited to medical secretarial students. *Prerequisite Business Education 212, Medical Secretary 101; or permission of instructor*. Fall semester.

272 Practicum

6 credits. The student will be placed in a hospital, a doctor's office, a dentist's office, or some other health care facility for practical experience for a portion of the semester. It is the student's responsibility to provide transportation for the practicum.

BUSINESS ADMINISTRATION

See Department of Business, page 46.

BUSINESS EDUCATION

See Department of Business, page 46.

DEPARTMENT OF CHEMISTRY

Professors Hedrick, Proctor (*Director of the Medical Technology Program*), Ranck, Spangler
Associate Professors Reeder (*Chairman*), Schaeffer

Bachelor of Science

Professional Accreditation: The Elizabethtown College Chemistry Department is on the approved list of the Committee on Professional Training of the American Chemical Society. The affiliation of Elizabethtown College with seven accredited hospitals is recorded with the National Accrediting Agency for Clinical Laboratory Sciences.

The chemistry programs contribute to both the science component and the professional component of that "genuinely pragmatic mixture" of studies that Elizabethtown College seeks to foster. Students may choose chemistry as part of their General Education Core requirement as an elective, or as a major area of study leading to a career which requires an in-depth knowledge of chemistry.

Students majoring in chemistry typically go on to graduate studies in chemistry or biochemistry, to hospital or industrial laboratories, to the study of medicine, to secondary education, or to sales positions in the chemical industry.

The Department offers two programs, one in chemistry and the other in chemistry/medical technology. There are five options within **the chemistry program**: the American Chemical Society approved professional chemistry curriculum, and the pre-medical, secondary education certification, chemistry management, and chemical physics curricula. The American Chemical Society option prepares the student for graduate school or for a career in an industrial or government laboratory. The chemistry-management option prepares the student for a career in sales or management positions in the chemical or a related industry. Additional options may be tailored to the student's needs in consultation with the student's adviser and the Department Chairman. Students planning much work in chemistry should consult with a departmental adviser as early as possible to plan the sequence of courses in chemistry, mathematics, physics, biology, and modern foreign language which will be to their greatest advantage. Many upper-level chemistry courses have calculus and physics courses as prerequisites, making their early completion desirable. The

sequence for secondary education and general science certification also requires early planning to insure the proper spacing of education courses.

There are two options within **the medical technology program** offered in cooperation with hospital programs accredited by the American Medical Association's Committee on Allied Health and Accreditation (CAHEA). Most students choose the option requiring three years (100 semester hours) at Elizabethtown College plus a 12-month period of study at a hospital approved by the American Medical Association and Elizabethtown College. The degree is awarded upon the recommendation of the pathologist or program supervisor of the hospital and the program director of the College. Elizabethtown College is affiliated with Harrisburg Hospital, Polyclinic Hospital (Harrisburg), York Hospital, Lancaster General Hospital, St. Joseph Hospital (Lancaster), West Jersey Hospital (Voorhees, New Jersey), and Abington Hospital (Abington, Pennsylvania). The second option requires four years at Elizabethtown College followed by a clinical year, although the clinical year is not required for a degree from Elizabethtown College when this second option is chosen.

The A.C.S. approved option requires Chemistry 101, 102, 201, 202, 341, 343, 344, 351, 352, 402, 421, and 451 (or 491); Computer Science 115; Mathematics 201, 222 (competency); Physics 232 (competency); and Modern Language (German preferred, or French or Russian) 202 (competency).

The pre-medical option requires Chemistry 101, 102, 201, 202, 341, 343, 344, 351, 352; Biology 111, 112, and two advanced courses in biology; Mathematics 222 (competency); Physics 231 (competency); Computer Science 115; Modern Language (German preferred, or French or Russian) 202 (competency); and four additional credits selected from biology and chemistry.

The secondary education option requires Chemistry 101, 102, 201, 202, 341, 343, 344, 351, and 352; Computer Science 115; Mathematics 222 (competency); Physics 231 (competency); Modern Language (German preferred, or French or Russian) 202 (competency); Psychology 105; Education 305, 225d, 415, 225e, 473. The Department also participates in the general science certification program; for a detailed listing consult the interdisciplinary section of this catalog, page 93.

The chemistry-management option requires Chemistry 101, 102, 201, 202, 341, 343, 344, 351, 352; Computer Science 115; Mathematics 222 (competency); Physics 231 (competency); Modern Language (German preferred, or French or Russian) 202 (competency); Accounting 107; Business Administration 215, 325, 332, 265, 369, 466; Economics 101, 102.

The chemical physics option requires Chemistry 101, 104, 201, 341 (or Physics 403), 343, 344, 351, 352; Modern Language (German preferred, or French or Russian) 202 (competency); Computer Science 115; Mathematics 201, 222 (competency); 321 or 362; Physics 232, 344; plus two courses (minimum of seven semester hours) from a specified group of chemistry, mathematics, and physics courses.

The medical technology three-year option requires Chemistry 101, 102, 201, 202, 305, 325, (315 recommended); Biology 111, 112, 235, and four credits of the following: 201; 202, 202L; 315, 315L; 324, 324L, 341, or 352 (Note: students who take a biology laboratory must take the lecture associated with it; they may, however, take the lecture without the laboratory); Physics 203; Mathematics 101 or 121. In this option Mathematics 101 or 121 is defined as meeting the Core requirement for mathematics instead of the six credits normally required. Core and electives must total 100 semester hours. The clinical year includes a minimum of 28 additional semester hours. The four-year medical technology option also requires Chemistry 315, Mathematics 151, and one additional course in biology.

101 General Chemistry

4 credits. (Core) A study of the principles of chemistry from the viewpoint of modern theory of atomic and molecular structure. Hours: lecture 3, laboratory 3. *Prerequisite* high school algebra or equivalent. Fall semester.

102 General Chemistry

4 credits. (Core) For students who plan to take additional courses in chemistry. Treats in detail the principles of chemical equilibria in aqueous solution. Hours: lecture 3, laboratory 3. *Prerequisite* Chemistry 101. Spring semester.

104 General Chemistry

4 credits. (Core) For students who will take no further chemistry. Includes basic treatment of organic chemistry, biochemistry, and other selected topics which are treated in depth in advanced courses. Hours: lecture 3, laboratory 3. *Prerequisite* Chemistry 101. Spring semester.

201 Organic Chemistry

4 credits. (Core) A study of the compounds of carbon, aliphatic and aromatic, their properties, synthesis, structures, and uses. Also includes mechanisms of their reactions and the application of instrumental methods in this area of chemistry. Hours: lecture 3, laboratory 3. *Prerequisite* Chemistry 102. Fall semester.

202 Organic Chemistry

4 credits. (Core) A continuation of 201, including some basic biochemistry. *Prerequisite* Chemistry 201. Spring semester.

305 Quantitative Analysis

4 credits. (Core) Principles and practices of chemical analysis by gravimetric, volumetric, and instrumental methods. Methods and determinations chosen to be appropriate to the student's major. Hours: lecture 2, laboratory 8. *Prerequisite* Chemistry 102, Mathematics 101 or equivalent. Spring semester.

315 Instrumental Analysis

4 credits. (Core) Analysis with modern instruments and techniques, chiefly spectrophotometry, potentiometry, gas chromatography, and includes a brief treatment of electronics. Emphasis on chemical and physical theories that make instrumental methods useful. Hours: lecture 2, laboratory 8. *Prerequisite* Chemistry 102, Mathematics 101 or equivalent.

325 Biochemistry

4 credits. (Core) An introduction to the chemistry of living matter, treating some of the principles required to understand the structures, properties, and metabolism of proteins, lipids, carbohydrates, and nucleic acids, and some of the experimental techniques used. Hours: lecture 2, laboratory 6. *Prerequisite* Chemistry 202; and 305 or 351.

333 Computer Systems Interfacing (Computer Science 333, Physics 333)

3 credits. Digital logic and integrated circuits to implement logic; architecture and machine language, programming minicomputers and microprocessors; design, testing, and construction of instrument-to-computer and computer-to-computer interfaces; design and testing of supporting software. Hours: lecture 1, laboratory 6. Fall semester.

341 Chemical Equilibrium and Kinetics

3 credits. (Core) An introduction to thermodynamics as applied to chemical equilibria in ideal and non-ideal, homogeneous and heterogeneous systems. Also includes ionic solutions, electrochemistry and rate equations, and their molecular basis. *Prerequisite* Chemistry 102, Mathematics 222, Physics 231. Fall semester.

343 Introduction to Quantum Theory (Physics 343)

3 credits. (Core) An introduction to the principles of quantum theory, radiation atomic spectra, and the extranuclear structure of the atom. *Prerequisite* Chemistry 102, Mathematics 222, Physics 232. Fall semester.

344 Chemical Bonding and the Structure of Matter

3 credits. (Core) Includes ionic bonding, the valence bond, and molecular orbital theories of covalent bonding and intermolecular forces; spectroscopic and diffraction methods of determination of molecular structure; liquid and solid states of matter. *Prerequisite Chemistry 343*. Spring semester.

351 Advanced Chemistry Laboratory I

4 credits. (Core) See description following 451. Hours: lecture 2, laboratory 8. *Prerequisite Chemistry 202, Computer Science 105; corequisite Chemistry 341*. Fall semester.

352 Advanced Chemistry Laboratory II

4 credits. (Core) See description following 451. Hours: lecture 1, laboratory 12. *Prerequisite Chemistry 351; corequisite Chemistry 343*. Spring semester.

451 Advanced Chemistry Laboratory III

4 credits. (Core) Hours: lecture 0, laboratory 16. *Prerequisite Chemistry 352*. Fall semester. Chemistry 351, 352, 451 is a sequence of courses integrating synthetic, analytical, physical, organic, inorganic, biochemical, and radiochemical laboratory practices. Individual problems may require from three to ten weeks. The chemical literature, digital computers, and statistical methods are introduced during the first semester and used extensively thereafter. Use of modern instrumentation such as the infrared spectrophotometer, gas chromatograph, x-ray diffractometer, and NMR spectrometer is provided on an individual basis. By the time students have completed Chemistry 451 they should be familiar with the basic laboratory practices appropriate for chemists at the bachelor's level.

371-380 Special Topics in Chemistry

Variable credit. (Core) Study of an advanced topic, experimental or theoretical, of special interest to the student. *Prerequisite permission of instructor and Department Chairman*.

402 Advanced Inorganic Chemistry

3 credits. (Core) Study of the elements and their compounds based upon atomic and molecular structures. *Prerequisite Chemistry 344*. Spring semester.

421 Advanced Organic Chemistry

3 credits. (Core) A study of organic reactions based on experimental and advanced theoretical studies. *Prerequisite Chemistry 202, 344*. Fall semester.

460-469 Clinical Courses in Medical Technology

28 credits (minimum). Instruction during the clinical year will cover the areas of chemistry (urinalysis), pulmonary function (radioisotopes), microbiology (parasitology, mycology, serology, virology), and hematology (coagulation, blood bank). Lectures in medical ethics, management, medical terminology, laboratory mathematics, and anatomy may be given. Experience in the various clinical laboratories is also provided. Hospital course descriptions, as well as additional information about affiliated hospital programs are in the medical technology catalog addendum, along with admission requirements. *Prerequisite admission to the medical technology school of the cooperating hospital*.

491 Research in Chemistry

Variable credit. (Core) An original experimental or theoretical investigation under the close supervision of a faculty member. Experimental design and a written report are required. *Prerequisite permission of instructor*. Fall semester.

492 Research in Chemistry

Variable credit. (Core) Same as 491. *Prerequisite permission of instructor*. Spring semester.

Education 305 Practicum in Secondary Education: Science

3 credits. Teaching science in secondary schools. *Prerequisite Psychology 105; corequisite Education 225d*

DEPARTMENT OF COMMUNICATION ARTS

Associate Professors Riley, Smith (*Chairman*)

Bachelor of Arts

The Communication Arts Department offers courses in broadcasting, journalism, and speech with the aim of assisting students to develop their ability to communicate effectively in a democratic society and to build meaningful and productive lives on personal, interpersonal, and public levels. Career possibilities include positions in advertising, sales, public relations, business and industrial communications, broadcasting, newspaper and magazine writing, and reporting. The Department offers college-wide activities, including play production, speech activities, and radio broadcasting with WWEC, the campus radio station. All majors are expected to participate actively in the various extra-curricular activities sponsored by the Department.

The 45 credit hours required for a Bachelor of Arts in Communication Arts include Communication Arts 102 (for a total of 3 credit hours), 107, 108, 167, 206 or 208, 231, 241, 243, 244, 332, 441, plus 12 elective hours within the major. A major is permitted to count no more than 57 hours in communication arts towards graduation requirements. No theatre courses may count towards the major.

Every major must observe the following requirements. Students are required to maintain an overall 2.0 G.P.A. in the major. Students may not count a course towards requirements of the major and also towards requirements for the General Education Core: one course may fulfill only one requirement.

102 Applied Broadcasting

½ credit. Students are assigned work in the various departments of the campus radio station WWEC under supervision of its General Manager. May be repeated up to 4 credits. Majors only. Graded pass, no pass.

105 Basic Speech

3 credits. Basic instruction in developing poise and confidence in speaking, with emphasis on the speaker's personality, voice, diction, and body movement; fundamentals of speech preparation. Spring semester.

107 Communication Theory and Research

3 credits. A study of communication theory, research methods, and message organization. Required as the first communication arts course for all freshman declared majors. Fall semester.

108 Voice and Articulation

3 credits. A course treating the physiological and psychological aspects of speech production, including an analysis of acceptable standards of voice quality, articulation, and pronunciation. Spring semester.

167 Oral Interpretation

3 credits. (Core) The theory and practice of communicating prose and poetry to the listener through vocal and bodily techniques, tone, point-of-view, rhythm, and pace. Fall semester.

206 Persuasion

3 credits. A study of the theory and techniques of persuasion from the perspective of the persuader and of his audience; topics include the ethics, social responsibility, and motivation of persuasion; the techniques of nonverbal communication and mass appeals. *Prerequisite* Communication Arts 105 or permission of instructor. Spring semester.

208 Interpersonal Communications

3 credits. A study of the theory and application of interpersonal communication on the personal, educational, and organizational levels. *Prerequisite* Communication Arts 107 or permission of instructor. Spring semester.

231 Basic Reporting and Newswriting

3 credits. An introductory study of news media and values, with emphasis on effective reporting through the analysis of writing and news stories. *Prerequisite* Business Education 111, or a knowledge of typing, or permission of instructor. Fall semester.

234 Photojournalism

3 credits. Designed to provide experiential learning in the areas of documentary and emotional photography. Analysis of the works of photographers to provide a basis for developing techniques of communication. Includes camera and darkroom techniques. Students will be required to pay a laboratory fee. *Prerequisite* Communication Arts 231. Spring semester.

241 Introduction to Television Production

3 credits. An introduction to the production equipment and graphic techniques utilized in television. *Prerequisite for majors Communication Arts 107.* Fall semester.

243 Broadcast News

3 credits. An examination of the methods used by radio and television reporters to analyze and write the news. *Prerequisite for majors Communications Arts 107.* Fall semester.

244 Broadcast Copy

3 credits. An introductory study of the varied kinds of on-air copywriting within the radio and television industries. *Prerequisite for majors Communication Arts 107.*

332 Feature Writing

3 credits. Concentrates on soft news, background stories, human interest, humor columns, editorials, magazine writing, radio and television features. *Prerequisite for majors Communication Arts 231.*

334 Editing and Layout

3 credits. Students, working in teams, will develop a printed piece from concept through copy preparation, layout, mechanics, proofreading, printing, and distribution. The course emphasizes editing copy, learning to write headlines and captions, using art and photography, and learning to work within budgets and deadlines. *Prerequisite Communication Arts 231 and 232, or permission of instructor.*

339 Public Relations

3 credits. What public relations is, how and when it is used, how to express points of view, how to set ideas and concepts to audiences. *Prerequisite Communication Arts 231 or permission of instructor.*

341 Radio Production

3 credits. An advanced look at the techniques used to produce radio commercials, news, documentaries, and so forth. *Prerequisite at least 1 full credit in Communication Arts 102; and 243, 244.*

342 Television Production

3 credits. An advanced look at the techniques used to produce television commercials, news, documentaries, and so forth. *Prerequisite Communication Arts 241, 243, 244.* Spring semester.

370-379 Special Problems / Seminars in Communication Arts

Variable credit. A course designed to allow the student to pursue topics of special relevance.

441 Issues in Broadcasting

3 credits. A seminar examining the history of broadcasting, broadcast programming practices, and current relevant issues confronting the media. *Prerequisite permission of instructor and, for majors, junior or senior status.* Fall semester.

442 Communication Law

3 credits. A seminar examining the history and current standing of the laws affecting broadcasters and journalists. *Prerequisite permission of instructor and, for majors, junior or senior status.* Spring semester.

470-479 Practicum and Internship

Variable credit. Instruction on an individual basis for credit from the communication arts faculty or other qualified professionals in the student's chosen field: speech, theatre, broadcasting, or journalism. *Prerequisite permission of the Chairman of the Department.*

480-489 Independent Study in Communication Arts

Variable credit. Designed to give a student the opportunity to work in an area of major interest under the guidance of members of the communication arts faculty. *Prerequisite permission of instructor.*

THEATRE**151 Invitation to the Theatre**

3 credits. (Core) Theatre as a social experience—its people, its genre, and its current role in our society. Trips to area productions, paid for by students, will be an essential part of the course. Fall semester.

252 Theatre History

3 credits. (Core) The development of Western and American theatre with emphasis on plays, playwrights, actors, and theatre designers. Spring semester.

257 Stagecraft and Lighting

3 credits. (Core) The technique and theory of staging and lighting a theatre production; topics include set construction and current lighting effects. Course may be offered either semester, depending upon departmental needs.

268 Basic Acting

3 credits. (Core) Theory and practice in current acting methods. Students will be expected to participate in a number of class projects involving the memorization of parts.

DEPARTMENT OF COMPUTER SCIENCE

Professors Ranck, Shubert (*Chairman*)

Associate Professor Zugarek

Assistant Professors Leap, Tulley

The advent of high-speed machines with enormous capacity for the gathering, processing, storage, retrieval, and communication of information has affected nearly every aspect of our professions and our daily lives. Courses in computer science encourage the exploration and understanding of this social and technological phenomenon at several levels. Survey courses are provided for those who wish to understand in broad social contexts the nature of the computer and its effect on our lives and on society. Programming and language courses are provided for those who need to become skillful users of the computer. Advanced study in theory, hardware, software, and applications is provided for those who want to use the computer effectively and knowledgeably in another discipline. Advanced courses are designed to relate closely to the curricula in business, the natural and social sciences, engineering, and mathematics, and students are encouraged to develop simultaneous strengths in computing and in a discipline in which the computer is used as a tool. The department offers two programs, one in computer science, the other in computer science/business information systems. Both programs provide a strong curriculum from which either a professional career may be launched, or a graduate program pursued.

The College's main computing facility is housed in Nicarry Hall and consists of a large DEC system-10 computer with 256,000 words of main memory, 175 million characters of additional online storage, two 9-track magnetic tape drives, an incremental plotter, and a Tektronix 4010 graphics terminal. There are 22 computer terminals throughout the campus which provide the student with 24-hour access to the computer. All students enrolled in courses requiring use of the computer are assigned online storage space where they can keep their computer work. Major software systems available on the computer include such languages as BASIC, COBOL, FORTRAN, and PASCAL; a Data Base Management system; GASP (a simulation package); SPSS (a statistical package); and PLOT-10 (an interactive graphics package).

In addition to the main computer facility there is a mini/micro computer laboratory housed in Gible Science Hall. This laboratory is equipped with a PDP-8 minicomputer system, LSI-11 and INTEL-8080 micro computers, and an INTEL PROMPT-48 microprocessor development system. The Physics department also has a PDP-8 minicomputer system used for real-time data collection and interactive data analysis applications.

All computer science and computer science/business information systems majors are required to take a minimum of 39 hours in computer science courses including Computer Science 125, 145, 221, 222, 332, 341, and 490.

The computer science major is further required to take Computer Science 231, 232, 322; Mathematics 121, 122, 151, 201, and one course chosen from 172, 222, 252; and an area elective which includes four courses in one area other than computer science; these courses may not be chosen from among those required for computer science or for Core, and must be approved by the computer science faculty advisor.

The computer science/business information systems major is further required to take Computer Science 135, 309, 340, 409; Mathematics 117, 151, and 172; Accounting 107, 108; Business Administration 215, 265, 325; Economics 101, 102.

115 Introduction to Scientific Computing

3 credits. An introduction to the use of computers for scientific applications. Topics include algorithmic problem-solving techniques, syntax of the FORTRAN and BASIC languages, and the use of subprograms, file handling and data representation.

125 Introduction to Computer Processing

3 credits. An overview of computer concepts and uses. Discussion of computer history, systems and equipment, hardware and software organization and operation. Computer programming and the BASIC language are studied.

135 Introduction to Business Computing

3 credits. An introduction to the application of the computer in a business environment. Topics include the structure of data, sequential file processing, table organization and processing, design and debugging techniques using COBOL. *Prerequisite* Computer Science 125.

145 Program Structures

3 credits. A study of program control structures and algorithms using PASCAL. Topics include procedures, recursion, program organization, structured programming, and elementary data structures. *Prerequisite* Computer Science 115 or 125.

221 Algorithms and Data Structures

3 credits. Methods for structuring data and the algorithms for handling them are developed. Topics include data types, aggregates, stacks, queues, linked lists, trees, string processing, sorting and searching and data management. *Prerequisite Computer Science 145.* Fall semester.

222 Assembly Language Programming

3 credits. Introduction to programming at the machine and assembly level including the relation to computer organization and the operating system interface. Topics include absolute and relocatable coding, program segmentation and code sharing, program linkage and loading, assembler operation, and macros. *Prerequisite Computer Science 145.* Spring semester.

231 Discrete Structures (Mathematics 231)

3 credits. Topics in discrete mathematics as they apply to computer science including sets, relations, graphs and trees, Boolean algebras, groups and fields. Fall, alternate years.

232 Formal Languages

3 credits. The theoretical and practical analysis of the syntax of programming languages. Topics include the concepts and terminology associated with grammars, graph searching, parsing by recursive descent, and the theory of error repair and recovery. *Prerequisite Computer Science 221, 231.* Spring, alternate years.

309 Programming Business Applications

3 credits. An advanced study of the COBOL language and a study of the concepts and techniques of sorting and searching, report generation, file processing, and structuring data in files including random and ISAM files. Projects relating to programming in business will be assigned. *Prerequisite Computer Science 135.* Spring semester.

322 System Software Design

3 credits. Design and construction of system software such as text editors, compilers and assemblers. Topics include command and statement parsing techniques, symbol tables, code generation, code optimization. A project involving design and construction of a working systems program will be assigned. *Prerequisite Computer Science 222, 232.* Fall, alternate years.

332 Computer Organization

3 credits. Introduction to Boolean algebra, logic circuit and design, and their use in computer architecture. Basic parts of computer systems are studied including storage, control and input/output systems. *Prerequisite Computer Science 222.* Fall, alternate years.

333 Computer Systems Interfacing (Chemistry 333, Physics 333)

3 credits. Digital logic and integrated circuits to implement logic; architecture and machine language programming of mini-computers and microprocessors; design, testing, and construction of instrument-to-computer and computer-to-instrument interfaces; design and testing of supporting software.

340 Business Information Systems

3 credits. A study of information systems from the user's point of view intended to give the potential manager an appreciation for the information requirements of an organization as well as the manager's role in the design of such systems. Topics include information and systems theory; the relationship between management, systems, and information; systems design; and an investigation of information systems of the various functional areas within the organization. *Prerequisite Computer Science 125, Business Administration 215, 265.* Spring semester.

341 Systems Analysis and Design

3 credits. Analysis and design of computer-based and manual systems, including a study of information requirements, design approaches, processing methods, and data management systems. *Prerequisite Computer Science 125 and either 135 or 145.* Fall semester.

370-379 Special Topics

3 credits. A course designed to allow students to explore topics and problems of current relevance in computer science. *Prerequisite permission of instructor.*

409 Data Base and Information Systems

3 credits. A study of information systems design and data base management techniques. Topics include information retrieval theory, data base design, data models, maintenance, file security, data reliability, CODASYL recommendations on DBMS. *Prerequisite Computer Science 221, 309.* Fall, alternate years.

413 Systems Simulation

3 credits. Fundamentals of modeling, stochastic processes, statistical measures of validity, and queuing theory. Applications will be programmed in higher-level languages as well as a specialized simulation language. *Prerequisite Computer Science 115, 125; Mathematics 151; or permission of instructor.* Spring, alternate years.

422 Operating System Design and Principles

3 credits. An examination of the principles and theories behind the design of operating systems as well as their practical implementation. Topics include executives and monitors, task handlers, scheduling algorithms, file handlers, theories of resource allocation and sharing, multiprocessing and interprocess communication. *Prerequisite* Computer Science 322, 332. Fall, alternate years.

471 Internship in Computer Science

Variable credit. Work experience designed to supplement course work. By working for business, school, or government, the student gains valuable knowledge unavailable from textbooks. *Prerequisite approval of computer science faculty.*

480-489 Independent Study

Variable credit. Designed to allow the student to do independent study and research on a problem or topic in the field of computer science. *Prerequisite approval of computer science faculty and Dean of the Faculty.*

490-491 Readings and Projects in Computer Science

1-4 credits. A directed project or study requiring faculty acceptance of a proposal and a final report and defence of work. *Prerequisite junior or senior status and permission of instructor.*

DRAWING

See Department of Physics and Earth Science, page 80.

EARTH SCIENCE

See Department of Physics and Earth Science, page 80.

ECONOMICS

See Department of Business, page 46.

DEPARTMENT OF EDUCATION

Professors Rice (*Chairman*), Ziegler
Associate Professors Bowers, Callenbach, Fox
Assistant Professor Gaver

Bachelor of Science

The Department offers three major certification programs—Early Childhood (N-3), Elementary, (K-6), and Secondary (7-12)—which seek to combine a strong liberal arts education with the development of high professional competence. Complementing the General Education Core and, in secondary certification, the student's academic major, the certification programs bring together in a creative way the student, the school, and the subject to be taught. The Department further stresses the importance of supervised field experiences which complement on-campus courses in education.

While elementary and secondary certification are familiar to most people, early childhood education (leading to a nursery-kindergarten-primary 1-3 teaching certification) is a relatively new field and warrants further explanation. Encompassing the education of the child from birth to eight years of age, the early childhood program prepares individuals to teach in nursery school, kindergarten, and grades 1-3 in both public and private schools, and in child-care programs such as Day Care, Child Development, and Child Welfare centers, the Head Start and Follow Through programs, and so forth.

ADMISSION TO TEACHER EDUCATION PROGRAM

All applicants who plan to teach must, by the time they have completed Education 205 or 305, file a written application for admission to the Teacher Education Program and meet the qualifying criteria of the Department of Education: proficiency in English and speech, good physical and mental health, a grade point average of at least 2.0, approval of the Office of Student Affairs, satisfactory evaluation and recommendation by the members of the Department of Education, approval by the major department of prospective secondary school majors.

Note: Students who fail to meet these criteria as applicants, or who later fail to maintain satisfactory progress, are counseled out of the program and directed into other areas of endeavor.

PROGRESS TOWARD PROGRAM COMPLETION

1. Students are evaluated at the conclusion of each semester after admission into the program, and may be advised to withdraw at any time the Department determines that withdrawal is in the best interests of the College, the program, and the student.
2. Any grade below C in the teaching major after completion of the 100-level courses will disqualify a student from certification.
3. Students should apply for certification during the semester in which they will graduate. Should they apply after they have graduated, they must satisfactorily complete whatever additional requirements are in effect before they can receive certification.

CERTIFICATION PROGRAM REQUIREMENTS

The Secondary Certification Program (accompanied by the bachelor of art or bachelor of science degree, depending on the student's academic major):

- A. General Education Core as detailed by the College.
- B. Academic major as outlined by each program area which supports a certification program: business education, English, mathematics, science and general science, social studies.
- C. Professional education requirements: Education 305, 225d, 415, 225e, 473.

The Elementary Education Major (bachelor of science degree):

- A. General Education Core as detailed by the College. Psychology 225 must be taken as part of the social science Core requirement.
- B. Professional education requirements: Education 205, 225a–c, 235, 325, 335, 355, 365, 471, 490–498 (6 credits); Mathematics 211, 212; Psychology 225; Physical Education 285; Music 325, 326.
- C. Electives

The Early Childhood Education Major (bachelor of science degree):

- A. General Education Core as detailed by the College. Psychology 225 must be selected as part of the social science Core requirement.
- B. Professional education requirements: Education 205, 225a–c, 235, 315, 320, 325, 335, 355, 365, 472, 490–498 (6 credits); Mathematics 211, 212; Physical Education 285; Music 325, 326.
- C. Electives

205 Foundations of Education

4 credits. A study of some of the historical, philosophical, sociological, and psychological foundations of education. *Prerequisite Psychology 105.*

Note: Admission to the Teacher Education Program is a prerequisite to any other education course.

225 a–e Education Practicum

Variable credit. Provides instruction in media, and experience in the preschool, elementary, or secondary classroom. The practicum and its corequisite courses integrate classroom experience with on-campus study.

235 Fundamentals of Reading Instruction

3 credits. An introduction to the systematic assessment and teaching of the basic reading skills: word recognition, word analysis, and comprehension skills. *Prerequisite 205; corequisite Education 225b.*

305 Practicum in Secondary Education

4 credits. The instructional methodology of an academic discipline is integrated with in-school experience under the guidance of a clinical professor in the academic major: business education, English, mathematics, science and general science, social studies. *Prerequisite Psychology 105; corequisite Education 225d.*

310 History of Science

1 credit. A study of developments in science from the ancient Greeks to the twentieth century. *Prerequisite permission of instructor.*

315 Early Childhood Education

4 credits. A study of programs from preschool through grade 3, emphasizing the setting, the child, and the special needs and approaches of early childhood education. On-campus study is coordinated with the experiences of observing and participating in early childhood settings. *Prerequisite Education 235, Psychology 225.* Fall semester.

320 Special Methods in Early Childhood Education

4 credits. Integrates early childhood materials and methods into the framework of the pre-operational child. *Prerequisite Education 315; corequisite Education 325, 335, 355, 365.* Spring semester.

325 Science for Early Childhood/Science for Elementary Education

3 and 4 credits, respectively. A study of science concepts, procedures, and materials for the preschool and elementary child. *Prerequisite Education 315 (early childhood); 235 (elementary).*

335 Mathematics for Early Childhood/Mathematics for Elementary Education

3 and 4 credits, respectively. A study of mathematics concepts, procedures, and materials for the preschool and elementary child. *Prerequisite Education 315 (early childhood); 235 (elementary).*

355 Language Arts and Reading for Early Childhood/Language Arts and Reading for Elementary Education

3 and 4 credits, respectively. A study of concepts, procedures, and materials in language arts and reading for the preschool and elementary child. *Prerequisite Education 315 (early childhood); 235 (elementary).*

365 Social Studies for Early Childhood/Social Studies for Elementary Education

3 and 4 credits, respectively. A study of social studies concepts, procedures, and materials for the preschool and elementary child. *Prerequisite Education 315 (early childhood); 235 (elementary).*

371-380 Special Problems in Education

Variable credit. Topics chosen in response to student and faculty interests. *Prerequisite permission of instructor.*

415 Topics in Secondary Education

4 credits. Theory and practice of secondary education. Includes study of human development, interrelationships of individuals and groups, and other topics selected in response to standards for certification and other needs of the prospective secondary education teacher. *Prerequisite Education 305; corequisite Education 225e.*

471 Professional Internship, Early Childhood

16 credits. Student teaching in an early childhood classroom. *Prerequisite Education 320, 325, 335, 355, 365.*

472 Professional Internship, Elementary Education

16 credits. Student teaching in an elementary classroom. *Prerequisite Education 325, 335, 355, 365.*

473 Professional Internship, Secondary

12 credits. Student teaching in a secondary classroom. *Prerequisite Education 305; corequisite Education 415.*

480-489 Independent Study

Variable credit. Upon the initiative of the student, a program of study may be organized with a faculty member on a topic of mutual interest.

490-498 Special Topics

Variable credit. Courses designed to give students opportunity to pursue work in an area of major interest in such topics as art in the elementary school, creativity, computers in education, children's literature, developmental reading.

DEPARTMENT OF ENGLISH

Professors Campbell, Dwyer
Associate Professors Black, Russell
(*Chairperson*)

Assistant Professors Rohrkemper, Sarracino,
Taylor

Bachelor of Arts

The Department of English offers an education which stresses both the knowledge and effective use of language and an understanding and appreciation of our literary heritage. Excellence in both writing and literary studies is the fundamental aim of the General Education courses and of the rigorous and comprehensive program which prepares majors for graduate training in English or professions such as law and medicine, for teaching at the secondary level, or for the many careers which recognize the necessity for a sensitivity to language and its effective use.

The Department offers a major in English with the additional option of certification for the teaching of English at the secondary school level. English majors are required to take English 105, 241, 242, 394; two semesters of American literature; one course in literary forms (all English courses with the middle digit 1); two courses in literary movements (all English courses with the middle digit 2); one course in individual authors (all English courses, except English 339, with the middle digit 3); and an additional 12 hours of electives in English (excluding English 021 and 100).

Students wishing to be certified to teach English on the secondary level have these additional requirements: English 100 (which counts toward the English elective hours for certification candidates only), 383 and 344; Psychology 105; Education 305, 225d, 415, 225e, and 473.

021 Basic English (Developmental Studies 021)

2 credits. A study of the basic skills of writing (grammar, usage, mechanics) with emphasis upon paragraphing. Graded pass/no pass.

100 Expository Writing

3 credits. A course in the principles of writing in expository and persuasive discourse.

105 Introduction to Literature

3 credits. (Core) A study of the different genres of literature, intended to develop the ability to analyze, evaluate, and appreciate literature, and to provide the necessary background for upper-level literature courses. Readings are drawn from ma-

for authors such as Homer and Shakespeare.
Prerequisite to all literature courses. *Prerequisite English 100 or its exemption.*

213 Analysis of Poems

3 credits. (Core) Intensive training in reading the individual poem accurately and sensitively. *Prerequisite English 105.* Fall, alternate years.

241 Literary History of Britain I

3 credits. (Core) A survey of the development of British literature from Old English poetry through Milton. Required for majors. *Prerequisite English 105; permission of instructor for non-majors.* Fall semester.

242 Literary History of Britain II

3 credits. (Core) A survey of British literature from the Restoration to World War II with emphasis on the neoclassic, Romantic, and Victorian periods. Required for majors. *Prerequisite English 105; permission of instructor for non-majors.* Spring semester.

312 English Drama Before 1900

3 credits. (Core) A study of representative English plays, excluding Shakespeare, from the Middle Ages to the twentieth century, emphasizing Elizabethan and Jacobean drama. *Prerequisite English 105.* Fall, alternate years.

313 Modern Drama

3 credits. (Core) A study of drama from the realism of Ibsen through naturalism, expressionism, and symbolism to the current "avant garde" theatre. *Prerequisite English 105.* Spring semester.

314 The English Novel Before 1900

3 credits. (Core) A study of selected masterpieces from Defoe to Hardy as works of prose art and as turning points in the development of the form. *Prerequisite English 105.* Spring, alternate years.

317 Modern Novel

3 credits. (Core) A study of the work of major novelists of the twentieth century with emphasis upon the development of the novel as an art form. *Prerequisite English 105.* Fall semester.

318 Modern Poetry

3 credits. (Core) A study of at least 3 major twentieth-century poets as well as selections from writers who have published within the last 30 years. *Prerequisite English 105.* Spring semester.

320 Concepts of the Renaissance

3 credits. (Core) A study of the "ruling ideas" of the Renaissance in Britain; representative non-

dramatic writers with an emphasis on Spenser. *Prerequisite English 105.* Spring, alternate years.

322 The Seventeenth Century

3 credits. (Core) A study of the major non-dramatic writers, excluding Milton, from 1600 to 1660: among them, Donne, Jonson, Herbert, and selected prose writers. *Prerequisite English 105.* Fall, alternate years.

323 The Restoration and Eighteenth Century

3 credits. (Core) A study of poetry and prose from 1660 to 1800 with an emphasis on Dryden, Swift, Pope, Sterne, and Johnson. *Prerequisite English 105.* Fall, alternate years.

327 The Romantic Movement

3 credits. (Core) A study of selected poetry and prose most significantly embodying the central concepts and achievements of English Romanticism. *Prerequisite English 105.* Fall, alternate years.

328 The Victorian Period

3 credits. (Core) A study of selected poetry and prose from Tennyson to Hardy particularly emphasizing the changing responses of the artist to the conflicts stemming from the industrialization of the period. *Prerequisite English 105.* Spring, alternate years.

331 Chaucer

3 credits. (Core) A study of representative works of Chaucer. *Prerequisite English 105.* Fall, alternate years.

332 Shakespeare

3 credits. (Core) A study of representative works of Shakespeare. *Prerequisite English 105.* Spring semester.

333 Milton

3 credits. (Core) A study of representative works of Milton. *Prerequisite English 105.* Spring, alternate years.

337 Eighteenth-Century English Authors

3 credits. (Core) A study of representative works of one or two major authors such as Pope, Swift, Fielding, and Goldsmith. *Prerequisite English 105.* Fall, alternate years.

338 Nineteenth-Century English Authors

3 credits. (Core) A study of representative works of one or two major authors such as Blake, Keats, Dickens, and Hardy. *Prerequisite English 105.* Fall, alternate years.

339 American Authors

3 credits. (Core) A study of the writings of one or two American authors such as Melville, James, Whitman, and Faulkner. Satisfies American literature rather than major author requirement for English majors. *Prerequisite English 105.* Spring, alternate years.

340 The American Romantic Movement

3 credits. (Core) A study of American Transcendentalism, including its sources, and of major figures of the period such as Hawthorne, Melville, Whitman, Emerson, and Thoreau. *Prerequisite English 105.* Fall, alternate years.

341 The Rise of Realism in American Literature

3 credits. (Core) A study of American literature in the late nineteenth and early twentieth centuries with emphasis on such writers as Dickinson, Clemens, Robinson, Frost, Dreiser, and Fitzgerald. *Prerequisite English 105.* Spring, alternate years.

342 Experimentalism in American Literature

3 credits. (Core) A survey of major American writers of the last 50 years, authors such as Pound, Eliot, Faulkner, Williams, Stevens, Jeffers, Moore, and Nabokov. *Prerequisite English 105.* Fall, alternate years.

344 Methods Seminar in Teaching Language and Composition

3 credits. The teaching of English grammar and usage, with reference to teaching composition at the secondary school level; practical application of various methodologies through tutoring internships in the Writing Laboratory. *Prerequisite to professional semester.* Spring semester.

352 Fantasy in Literature

3 credits. (Core) A study of major works of fantasy (*Alice in Wonderland*, *The Hobbit*, *The Little Prince*, and others) focusing on the thematic significance of "the journey." *Prerequisite English 105.* Spring, alternate years.

357 Women and Literature

3 credits. (Core) A study of the effects on women writers and readers of a male dominated literary tradition. *Prerequisite English 105.* Fall, alternate years.

370-379 Special Problems

3 credits. Courses involving specific subjects chosen in response to student-faculty interest. *Prerequisite English 105.*

381 Creative Writing (Verse, Prose)

3 credits. A course for the writing of original verse or prose, or both, and developing an understanding of the craftsmanship involved. Graded pass, no-pass. *Prerequisite permission of instructor.* Fall, alternate years.

383 Advanced Composition

3 credits. An analysis of language to refine the student's resources in becoming a sophisticated writer; research methods, critical analysis, and extensive writing. *Prerequisite permission of instructor.* Spring semester.

394 English Seminar

3 credits. A seminar for English majors including research techniques, a research project, and introductions to classical, Biblical, linguistic, and critical backgrounds for English studies. Required for majors. *Prerequisite English 105; permission of instructor for non-majors.* Spring semester.

480-489 Independent Studies in English

2-3 credits. A course designed to give the individual student the opportunity to pursue work in an area of major interest under the guidance of a member of the Department of English. See the Department Chairman for registration instructions.

Education 305 Practicum in Secondary Education: English

4 credits. The exploration and application of various teaching styles and strategies in the teaching of literature in the secondary school English classroom; in-school observations and internships as paraprofessional experience. *Prerequisite Psychology 105; corequisite Education 225d.*

FRENCH

See *Department of Modern Languages*, page 70.

GEOGRAPHY

See *Department of History*, page 65.

GERMAN

See *Department of Modern Languages*, page 70.

DEPARTMENT OF HISTORY

Professors Kreider (*Chairman*), Mumford,
Winpenny
Associate Professor Vassady
Assistant Professor Poole

Bachelor of Arts

History, the inquiry into the deeds and thoughts of man's past, is a valuable and enjoyable basis for a liberal education. The student of history invariably acquires, through this vicarious experience, a better perspective which can lead to sound judgment and wise decisions. Furthermore, an understanding of the repetitive and complex nature of man's perennial problems produces in the student a healthy sophistication and a steady self-confidence which help to dissolve the uncertainties of modern life.

The Department's program is designed to prepare students for further study in graduate programs in history, theology, government, law, museum studies, and library science; or for careers in teaching, government service, and business.

The history major requires the student satisfactorily to complete 39 hours of work in history, including History 105 (or its equivalent) and 390. One is required to select nine hours in United States history; nine hours in European history, and six hours in non-United States, non-European courses.

History is one of the major areas in the social studies major, which prepares a student for certification to teach in secondary schools. Students with interest in this area should consult the detailed descriptions in the interdisciplinary section of this catalog, page 93.

It is possible for the student to acquire a Bachelor of Arts in History as a history major and receive certification in the social studies. For further explanation, contact a member of the History Department.

Combinations which allow the student a major and training for other careers are possible. For example, one may major in history and also take a recommended program of courses in business. Consult the Department for other options in combination with communication arts, political science, or other program areas.

105 Topics in the History of Western Civilization

3 credits. (Core) A highly selective approach to the long-range developments and to the major problems of our Western heritage.

201 History of the United States to 1877

3 credits. (Core) A narrative account and analysis of the social, political, economic, and diplomatic forces that have shaped the American experience from the earliest colonial settlements through the end of post-Civil War Reconstruction (c. 1877).

202 History of the United States since 1877

3 credits. (Core) A narrative account and analysis of the social, political, economic, and diplomatic forces that have shaped the American experience from the beginning of Reconstruction—roughly 1865—through the resignation of Richard Nixon.

205 Modern Far East

3 credits. (Core) A survey of China, Japan, Korea, and Southeast Asia since 1800, with emphasis on East-West relations.

211 Greek and Roman History

3 credits. (Core) Athens in the classical age from Solon to Alexander; Rome during the Republic, the Augustan Age and the early Empire.

212 Medieval History

3 credits. (Core) Western Europe from the decline of the Roman Empire to the fifteenth century with emphasis on the feudal system, the role of the Latin Church, and the rise of universities.

213 Renaissance and Reformation

3 credits. (Core) The waning of the Middle Ages with emphasis on humanism in Italy and the North, the crisis in the Church, and the Protestant Reformation.

214 The Age of Louis XIV

3 credits. (Core) Europe in the seventeenth and eighteenth centuries with emphasis on the ascendancy of France, the rise of the Dutch Republic, and the Revolution in Stuart England.

215 English History to 1603

3 credits. (Core) From the Anglo-Saxons through the centuries with emphasis on the constitutional and legal foundations, and the unity of Church and Crown up to the age of Elizabeth I.

216 English History since 1603

3 credits. (Core) Evolution of the monarchy and parliament since the Stuarts, and the transition from an agrarian society into an industrial democracy; emphasis on continuity and change.

306 Recent History of the United States

3 credits. (Core) Analysis of the economic, political, social, and diplomatic forces responsible for shaping the American experience since 1900; conflicting interpretations stressed.

313 History of Tsarist Russia

3 credits. (Core) The development of Russia from its medieval origins to the twentieth century with emphasis on the development of Tsarist institutions, society, and political development.

314 History of Soviet Russia

3 credits. (Core) A study of the Russian Revolution and the building of the new society with emphasis on the Soviet Union's position in the modern world.

317 Revolution, Nationalism, and Democracy

3 credits. (Core) Nineteenth-century Europe from the Vienna Congress to World War I with particular emphasis on the conservative reaction to the French Revolution, the movement towards democracy, and the surge of nationalism.

318 The Age of Anxiety

3 credits. (Core) An examination of twentieth-century Europe, surveying both World Wars and their effect on modern society; emphasis on the rise of totalitarian ideologies, the plight of democracy, and the Depression.

323 History of China

3 credits. (Core) A survey of Chinese history and culture with emphasis on the modern period and the meeting of China and the West.

324 History of Japan

3 credits. (Core) A survey of Japanese history and culture from the beginning to modern times, including Japan's response to the Western impact.

327 History of Africa

3 credits. (Core) A survey of African history and culture using an interdisciplinary approach with emphasis on the history of the politics, cultures, arts, and societies of the African people.

328 Modern Africa

3 credits. (Core) Africa in the nineteenth and twentieth centuries with emphasis on the age of imperialism and colonialism, as well as on African nationalism leading to independence.

330-339 Studies in United States History

3 credits for each course. (Core) An analytical inquiry into special topics and periods: economic history, urban history, colonial America, the American Revolution, the Middle Period, the Age of Industrialism, technology and society, and so forth.

340-349 Minorities in United States History

3 credits for each course. (Core) An incisive view of minorities in a society venerating majoritarian rule, for example: Afro-American history, immigration and ethnicity, Southern history, Indian history, and women in history.

370-379 Special Problems

3 credits. (Core) Special subjects chosen as a response to student and faculty interest.

390 Historical Methods and Historiography

3 credits. (Core) Thorough examination of the development of the historical discipline, and the tools employed by the researcher, concluding with a study of historians themselves.

403 A History of United States Foreign Relations

3 credits. (Core) A study of the major personalities, events, and trends in United States foreign policy with an emphasis on the influence exerted by domestic considerations.

406 Social and Intellectual History of the United States

3 credits. (Core) An examination of the major social and intellectual movements in the United States from colonial times to the present with an emphasis on reform and reformers.

480-489 Independent Study

Variable credit. (Core) Designed to offer an opportunity to use techniques of historical interpretation in specific problem areas. *Prerequisite approval of the Dean of the Faculty; permission of instructor.*

498-499 History Seminar

3 credits. (Core) A special course designed primarily for (but not limited to) senior majors in the Department. Research is an integral part of the learning experience.

GEOGRAPHY**105 World Geography**

3 credits. A regional and topical geography concentrating upon the Old World, including an introduction to political geography, and emphasizing human rather than physical geography.

205 Geography of the United States and Pennsylvania

3 credits. A regional geography of the United States, emphasizing the interrelationships between geography and economics, politics, and culture. Pennsylvania will be examined as one of several case studies.

DEPARTMENT OF MATHEMATICS

Professors Blaisdell, Bossler, D. Koontz,
Shubert (*Chairman*)
Associate Professors Dolan,
J. Koontz, Morse

Bachelor of Science

The program in mathematics at Elizabethtown College is designed to prepare the mathematics major for graduate study, for secondary teaching, or for employment in industry and government. Service courses provide students in the physical, managerial, social, and life sciences with the mathematical tools essential for their respective fields. These courses also satisfy the General Education Core requirement and teach an awareness of the cultural significance of mathematics and its contribution to the modern world. Instruction is designed to promote the development of proficiency with deductive reasoning, the ability to mathematically model "real" world phenomena, problem solving strategies, and computational skills.

The Department offers four options. The *pure mathematics option* is designed to provide a firm foundation for successful graduate study in mathematics. The major objective is to promote the development of self-reliance, initiative, and confidence; i.e., mathematical maturity. The *secondary education option* is required for Secondary Education Certification. Students in this option are given a solid foundation in geometry, algebra, and statistics essential for effective teaching and analysis of the secondary school mathematics curriculum. The *applied mathematics option* provides a firm foundation in applied mathematics, enabling graduates to pursue careers in industry and government. Students electing this option usually develop additional strength in at least one area which uses mathematics extensively, such as the physical, social, life, or managerial sciences. Finally, a *computer science option* is available for the student who desires to be a highly skilled computer analyst with an unusually strong background in mathematics.

All mathematics majors are required to take a minimum of 36 hours in mathematics courses, including Mathematics 121, 122, 201, and 222, and at least two courses selected from 301, 302, 421, 422, and 441. Computer Science 125 or 115 is required and should be taken as early as possible. Each major is also required to take either six hours in a modern language, or six hours of computer science courses in addition to Computer Science 125 or 115. Finally, at least one of the four options must be completed as follows:

The pure mathematics option requires Mathematics 302, 422, 441, and six hours from other 300 or 400-level mathematics courses.

The secondary education option (required for secondary education certification) requires Mathematics 301, 341, 351, 421, either 302 or 422, and six hours from other 300 or 400-level mathematics courses. In addition, Psychology 105; Education 305, 225d, 415, 225e, 473.

The applied mathematics option requires any five courses selected from Mathematics 321, 324, 351, 352, 361, 362.

The computer science option requires Mathematics 321, 324, 361, 362, and any other 300 or 400-level mathematics course. In addition, Computer Science 115, 145, 221, 222, and six hours in any 200, 300 or 400-level computer science courses. (These computer science courses will also fulfill the modern language or computer skills requirement.)

011 Intermediate Algebra (Developmental Studies 011)

2 credits. A study of the fundamental algebraic and computational skills used in certain science courses and prerequisite to Mathematics 101 and 117.

101 Precalculus Mathematics

4 credits. (Core) Precalculus study of the function concept and of particular classes of functions: polynomial, rational, algebraic, exponential, logarithmic, and trigonometric functions. The main objective of this course is to prepare students for Mathematics 121. *Prerequisite Mathematics 011 (competency).*

117 Concepts of Calculus

4 credits. (Core) Designed to give students in the biological, social, and management sciences a firm working knowledge of calculus. The approach is intuitive with emphasis on applications. Topics include differentiation, curve sketching, exponential functions, and integration. *Prerequisite Mathematics 011 (competency).*

121 Calculus I

4 credits. (Core) A presentation of the basic concepts and techniques of the differential and integral calculus of elementary functions, including a study of limits and continuity. Applications are taken mostly from the physical sciences. *Prerequisite Mathematics 101 (competency).*

122 Calculus II

4 credits. (Core) A continuation of 121, involving the calculus of the trigonometric, exponential, logarithmic, and rational functions. Analytic geometry is also included. *Prerequisite Mathematics 121.*

151 Probability and Statistics

3 credits. (Core) A study of the basic principles of probability, frequency distributions, measures of location and dispersion, sample and population relationships, estimation, and hypothesis testing. The main objective of this course is to introduce students to statistical thinking and tools, and their relation to everyday life.

172 Finite Mathematics

3 credits. (Core) A study of various non-calculus topics, including set theory, logic, probability, matrices, linear programming, and Markov chains. Applications will be drawn from the biological and social sciences.

201 Linear Algebra

3 credits. (Core) A presentation of the basic concepts and techniques of linear algebra, including vectors, vector spaces, matrices, determinants, systems of linear equations, and linear transformations. *Prerequisite Mathematics 121.* Fall semester.

211 Concepts in Modern Mathematics I

3 credits. (Core) An introduction for liberal arts students and prospective elementary teachers to some of the concepts and applications of modern mathematics. Includes such topics as sets and functions, logic, measurement, metric system, introduction to the computer, numeration systems, and number theory. Fall semester.

212 Concepts in Modern Mathematics II

3 credits. (Core) A continuation of 211 for prospective elementary teachers. Topics include the structure of number systems, geometry, geometry of measurement, and an introduction to probability and statistics. *Prerequisite Mathematics 211 or permission of instructor.* Spring semester.

222 Calculus III

4 credits. (Core) A continuation of 122 completing the basic topics of the calculus sequence, including three-dimensional analytic geometry, series, calculus of functions of several variables, and an introduction to differential equations. *Prerequisite Mathematics 122.* Spring semester.

231 Discrete Structures (Computer Science 231)

3 credits. Topics in discrete mathematics as they apply to computer science, including sets, relations, graphs, and trees, Boolean algebras, groups, and fields. Fall, alternate years.

252 Statistical Methods and Data Analysis

3 credits. (Core) A continuation of material presented in 151. The course will emphasize statistical techniques useful in business, the social, physical, and life sciences. Topics include simple and multiple regression analysis, elements of experimental design, analysis of variance, and survey sampling. *Prerequisite Mathematics 151.* Spring semester.

301 Abstract Algebra I

3 credits. (Core) An axiomatic study of a variety of algebraic structures and concepts including divisibility, congruences, modular arithmetic, number theory, sets, groups, and rings. Emphasis on the development of skill in proof construction and interpretation of abstract concepts. *Prerequisite Mathematics 201.* Fall, alternate years.

302 Abstract Algebra II

3 credits. (Core) A continuation of 301. Emphasis will be given to rings, integral domains, fields, polynomials over integral domains and fields, vector spaces, and the development of the system of rational numbers. *Prerequisite Mathematics 301.* Spring, alternate years.

321 Differential Equations

3 credits. (Core) A study of standard methods for solving ordinary differential equations and boundary value problems. Topics include n^{th} order linear differential equations, the Laplace transformation, and power series solutions. *Prerequisite Mathematics 222.* Fall semester.

324 Mathematical Models and Applications

3 credits. (Core) Survey of a number of mathematical topics and a variety of models in the social and life sciences. Problems provide motivation for the development of tools and techniques employed throughout applied mathematics: axiomatics, probability theory, matrix algebra, simulation, and linear programming. *Prerequisite Mathematics 201, 222.* Spring semester.

341 Modern Geometry

3 credits. (Core) The concept of a geometry as a logical system based upon postulates and undefined elements, along with an appreciation of the historical evolution of geometries. Topics include incidence geometries, planes and space, congruence, inequalities, parallel postulates, parallel projections, similarities, circles, and additional theorems. Fall, alternate years.

351 Mathematical Statistics I

3 credits. (Core) A comprehensive development of the theory of statistics through a study of probability and distribution theory, including the uniform, geometric, binomial, hypergeometric, negative binomial, multinomial, Poisson, exponential, gamma, chi-square, Student's *t*, Snedecor's *F*, and normal distributions. *Prerequisite Mathematics 222.* Fall, alternate years.

352 Mathematical Statistics II

3 credits. (Core) A continuation of 351. A study of principles of statistical inference with an emphasis on estimation and hypothesis testing. *Prerequisite Mathematics 201, 351.* Spring, alternate years.

361 Numerical Methods in Matrix Algebra

3 credits. (Core) A study of selected topics in matrix algebra useful in advanced mathematical and statistical work involving multivariate analysis. Topics include several computer-oriented techniques applied to the inversion of matrices, determination of eigenvalues and eigenvectors, diagonalization of matrices, and iterative solutions of systems of equations. *Prerequisite Mathematics 201, 222, and Computer Science 125 or 115.* Fall, alternate years.

362 Numerical Analysis

3 credits. (Core) A study of iterative methods suitable for computer programming which are useful in solving a variety of mathematical problems arising in engineering and the sciences. Topics include the solution of nonlinear equations, analysis of polynomial interpolation, numerical differentiation and integration, and numerical solutions of differential equations. *Prerequisite Mathematics 361 or permission of instructor.* Spring, alternate years.

370-379 Special Topics in Mathematics

Variable Credit. (Core) Directed study in topics of special interest to advanced undergraduate mathematics students. *Prerequisite permission of the Department of Mathematics Chairman.*

421 Real Analysis I

3 credits. (Core) A rigorous study of the fundamental concepts of analysis, including such topics as sets and functions, sequences of real numbers, series of real numbers, limits and metric spaces, and continuity. *Prerequisite Mathematics 201, 222.* Fall, alternate years.

422 Real Analysis II

3 credits. (Core) A continuation of 421, including such topics as integration, differentiation, Taylor series, sequences of functions, and series of functions. *Prerequisite Mathematics 421.* Spring, alternate years.

441 Topology

3 credits. (Core) A study of point set topology, using the axiomatic method. Topics include sets, metric spaces, topologies, continuity, separation axioms, compactness, and connectedness. *Prerequisite Mathematics 201, 222.* Spring, alternate years.

480-489 Independent Study

Variable credit. (Core)

Education 305 Practicum in Secondary Education: Mathematics

4 credits. *Prerequisite Psychology 105; corequisite Education 225d.*

MEDICAL SECRETARIAL SCIENCE

See Department of Business, page 46.

DEPARTMENT OF MODERN LANGUAGES

Associate Professors Daiga (*Acting Chairman*),
Goodling

Bachelor of Arts

In addition to serving the increasing demand in the professions and industry for men and women who are at home in more than one linguistic and cultural setting, the Department of Modern Languages offers students a unique learning experience. The study of a modern foreign language brings together practical training in language skills (understanding, speaking, reading, and writing) with an understanding of the sociology, history, and literature of the culture from which the language springs and which it expresses. The pragmatic virtues of a useable skill thereby join the humane values of liberal education. The Department of Modern Languages offers programs of study which reflect its desire to encourage both mastery of one or more foreign languages and an overall appreciation of the cultural contexts in which they occur. It directly serves bachelor of arts degree candidates majoring in languages, students whose degree programs require studies in languages, and students who, for professional or personal reasons, wish to broaden their cultural background.

The Department of Modern Languages offers instruction in French, German, Spanish, and Russian with majors in French, German, and Spanish. A major in the Department may be met by completing 30 credit hours in one language above 201-202. A minimum of 15 hours above 201-202 must be taken in residence at Elizabethtown College. Language majors are required to participate in the Brethren Colleges Abroad program. Other language students who have completed 202 or above are encouraged to participate in the program.

Department majors must include the following courses: in residence: Modern Language 221, 222, 323, 324, and a three-credit independent study project (481-490); in the Brethren Colleges Abroad Program: Advanced Conversation and Composition, Phonetics, French/German/Spanish History, and History of (Fr/Ge/Sp) Literature.

Upon successful completion of the Modern Language Association Cooperative Foreign Language test, a student may be exempted from the language requirement. This examination is administered free of charge during Freshman Orientation Week and in the spring semester of each year. It may be taken at any other time during the college year for the general college fee of \$20.00. However, this examination may be taken only once in any one language. Any student who wishes to continue beyond 101-102 the study of a language begun at another institution must take this examination to be placed in the appropriate course.

101 Beginning Language (Fr, Ge, Sp, Ru*, Esp*)

3 credits. Presents the elements of structure and seeks to develop the 4 language skills: hearing, speaking, reading, and writing. Culture-based readings and collateral laboratory assignments. Fall semester.

102 Beginning Language (Fr, Ge, Sp, Ru*, Esp*)

3 credits. A continuation of 101. *Prerequisite* 101 or *placement by examination*. Spring semester.

201 Intermediate Language (Fr, Ge, Sp, Ru*, Esp*)

3 credits. (Core) Reviews the fundamentals of structure and continues to develop the 4 language skills: hearing, speaking, reading, writing. Reading materials emphasize cultural and contemporary topics. Partially fulfills the B.A. language requirement. *Prerequisite* 102 or its equivalent. ** Fall semester.

202 Intermediate Language (Fr, Ge, Sp, Ru*, Esp*)

3 credits. (Core) A continuation of 201. Completes B.A. language requirement. *Prerequisite* 201 or *placement by examination*. Spring semester.

221 Conversation and Composition (Fr, Ge, Sp)

3 credits. Provides an opportunity for self-expression, orally and in writing, on situations of everyday life. Review of grammatical structures. Vocabulary development. *Prerequisite* 202 or *placement by examination*. Fall semester.

*Russian and Esperanto are offered upon sufficient student interest and faculty availability.

**Equivalency is met by successful completion of at least two years of high school language courses.

222 Conversation and Composition (Fr, Ge, Sp.)

3 credits. Topics of literary and cultural interest provide basis for conversation and composition. Emphasis on writing skills. Study of complex sentence structures. *Prerequisite 221 or permission of instructor.* Spring semester.

All courses numbered above 300 have a prerequisite of 222 or permission of instructor.

323 Introduction to Literature (Fr, Ge, Sp)

3 credits. (Core) Develops students' ability to read thoroughly, analyze, and appreciate literature. Selected readings representative of different literary genres.

324 Civilization (Fr, Ge, Sp)

3 credits. Traces significant facts and events of the cultural and historical evolution of France, Germany, or Spain to the twentieth century.

371-380 Special Problems (Fr, Ge, Sp)

Variable credit. Topics of special interest not otherwise covered in the curriculum. Topics depend upon student interest and faculty availability.

481-490 Independent Readings (Fr, Ge, Sp)

Variable credit. (Core) For senior language majors. Independent projects in some area of language or literature. Project may fulfill literature Core requirement, provided topic relates to literature in the foreign language and not to the language itself.

DEPARTMENT OF MUSIC

Professor Shull

Associate Professors Douglas, Harrison,
Kitchen, Simmers (*Chairman*), Stites

Bachelor of Arts, Bachelor of Science

The music programs are designed to develop student comprehension and appreciation of music as a cultural force in the past and present. Music majors are prepared for professional careers in education, therapy, and studio teaching, as well as graduate study.

The Department offers three programs leading to the degrees of Bachelor of Science in Music Education, Bachelor of Science in Music Therapy, and Bachelor of Arts in Music.

The music education major requires Music 101, 102, 103, 104, 201, 202, 203, 204, 231, 234, 237, 311, 312, 321, 322, 343, 415 or 417, 419, 441, 442, 471, a minimum of 12 hours of applied music instruction, a minimum of eight credit hours in ensemble participation, and Education 215. A minimum grade of C or above in all music courses and in Education 215 is required for certification. Music education majors may elect a choral, instrumental, or general emphasis, the requirements of each emphasis varying slightly from the above. Program approval status has been granted by the Pennsylvania Department of Education and the National Association of Schools of Music.

The music therapy major requires Music 101, 102, 103, 104, 141, 151, 201, 202, 203, 204, 231, 234, 237, 252, 311, 321, 343, 353, 354, 415 or 417, 419, 441, 442, 455, 456, 473, 474, 475, 476, 477, 478, 479, a minimum of 8 semester hours in applied music instruction, and a minimum of six hours credit in ensemble. A grade of C or above in all music and music therapy courses is required. A six-month internship in an approved clinical facility is required for graduation after completion of the four-year program. The music therapy program has been fully accredited by the National Association for Music Therapy and the National Association of Schools of Music.

The Bachelor of Arts in Music normally requires Music 101, 102, 103, 104, 201, 202, 203, 204, 321, 322, 415 or 417, 419, 441, 442, 12 semester hours credit in applied music and three hours of ensemble credit. The music requirements of the bachelor of arts degree are flexible and are determined by the needs and interests of each student. Under the guidance of a departmental adviser, each B.A. music major works out a program which includes at least 40 hours of music courses.

A copy of other departmental graduation requirements for music majors, including proficiency requirements in piano and voice, and recital participation and attendance, may be obtained from the Department Chairman's office.

The Music Department has a Preparatory Division which offers instruction to pre-college students, adults, and college students who desire to take instruction without credit. Instruction is available from qualified college student instructors and departmental faculty. Interested persons should contact the Director of the Preparatory Division.

101 Literature and Materials of Music

3 credits. (Core) Fundamentals of music theory, harmony, and form with emphasis on analytical and compositional skills. Includes introduction to music literature. *Corequisite Music 103* Fall semester.

102 Literature and Materials of Music

3 credits. (Core) A continuation of 101. *Prerequisite Music 101 or permission of instructor; corequisite Music 104.* Spring semester.

103 Fundamentals of Sight-Singing, Ear-Training, and Keyboard Harmony

1 credit. Development of visual, aural, and basic keyboard skills related to the theoretical and analytical materials covered in 101. *Corequisite Music 101.* Fall semester.

104 Sight-Singing, Ear-Training, and Keyboard Harmony

1 credit. A continuation of 103. *Prerequisite Music 103 or permission of instructor; corequisite Music 102.* Spring semester.

105 Introduction to Music Literature

3 credits. (Core) Introduction to the music of the Western world, major composers, and selected famous compositions, with emphasis on listening to music from the Baroque era to the present.

111 Voice Class

1 credit. (Core) Study of the fundamentals of breath control, tone production, and development of vocal technique. Open to all students.

113 Piano Class

1 credit. Designed to develop basic piano skills and knowledge of music fundamentals. Daily practice required. Not open to music majors. Credit for 113 given only upon completion of 114. Fall semester.

114 Piano Class

1 credit. A continuation of 113. *Prerequisite Music 113.* Spring semester

117 Piano Class

1 credit. Basic piano skills. Open to all music majors; required of those whose first applied instrument is not piano. *Prerequisite permission of instructor for non-majors.*

118 Piano Class

1 credit. A continuation of 117. *Prerequisite Music 117.*

119 Guitar Class

1 credit. An introductory course emphasizing studies in strumming, finger style, and note reading.

120 Guitar Class

1 credit. (Core) A thorough approach to classical guitar technique and classical literature.

141 Recreational Music

1 credit. The use of recreational instruments, materials and techniques with handicapped persons. *Prerequisite music major or permission of instructor.* Spring semester.

151 Introduction to Music Therapy

3 credits. A survey of music therapy through lecture-demonstration sessions, reading, student reports, and field trips. Emphasis on the potentials of music therapy with a variety of populations. *Prerequisite music major or permission of instructor.* Fall semester.

201 Advanced Literature and Materials of Music

3 credits. Advanced harmony including seventh chords, form, and analysis. *Prerequisite Music 102 or permission of instructor; corequisite Music 203.* Fall semester.

202 Advanced Literature and Materials of Music

3 credits. A continuation of 201 with emphasis on altered chords. Introduction to arranging, from small ensembles to the modern orchestra. *Prerequisite Music 201 or permission of instructor; corequisite Music 204.*

203 Advanced Sight-Singing, Ear-Training and Keyboard Harmony

1 credit. Continued emphasis on reading and dictation skills. *Corequisite Music 201.*

204 Advanced Sight-Singing, Ear-Training and Keyboard Harmony

1 credit. A continuation of 203. *Prerequisite Music 203 or permission of instructor; corequisite Music 202.*

231 Brass Class

1 credit. Methods of tone production, fingerings or positions, care and repair, and methods and materials for teaching trumpet or cornet, French horn, baritone, trombone, and tuba. Fall semester.

234 Percussion Class

1 credit. Methods of tone production, care and repair, and methods and materials for teaching snare drum, cymbals, timpani, and other percussion instruments. Spring semester.

235 History of Jazz

3 credits. (Core) Exploration of the chronological development of jazz as an American art form, from Blues and Ragtime to Third Stream and current styles. Offered on demand.

237 Elementary String Class

1 credit. Method of tone production, fingerings, care and repair, and methods and materials for teaching violin, viola, violoncello, and double bass. Fall semester.

238 Intermediate String Class

1 credit. A continuation of 237. *Prerequisite Music 237.* Spring semester.

252 Psychological Foundations of Music

2 credits. Study of acoustics and the psychology of music as they relate to life and the music professions. An examination of the events and circumstances that occur in music, and influence it. May be taken out of sequence or as an individual course by non-therapy majors. *Prerequisite music major or permission of instructor.* Spring semester.

311 Music in the Elementary School

3 credits. Thorough study of objectives, methods, and materials for elementary school music programs through singing, instrumental, rhythmic, creative, and listening activities. Detailed study and use of recent school music songbook series. Observations and laboratory experience included. *Prerequisite music majors or permission of instructor.* Fall semester.

312 Music in the Secondary School

3 credits. Methods and materials for secondary general music classes and performance groups, with special concentration on the junior high school general music class, adolescent voice problems, and the successful organization and direction of choral and instrumental performing groups. Observations and laboratory experience included. Spring semester.

321 Instrumental-Choral Conducting and Techniques

3 credits. Instruction in directing choruses, bands, and orchestras. Topics include conducting techniques, choral and instrumental methods and problems, score reading, and interpretation. *Prerequisite Music 202 or permission of instructor.*

322 Instrumental-Choral Conducting and Techniques

3 credits. A continuation of 321. *Prerequisite Music 321.* Spring semester.

325 Teaching Music in the Elementary School-Lab

1 credit. Music skills for elementary education majors. Fundamentals of music theory, chording skills on autoharp, and music reading skills. May be exempted by proficiency exams. A minimum grade of C is required.

326 Teaching Music in the Elementary School

3 credits. Study of teaching methods and materials for use in a balanced elementary music program that includes rhythmic activities, singing, playing melody-harmony instruments, and listening activities. Topics include the use of music in developing learning centers, ways of promoting individual creativity, and methods of integrating music with other aspects of childhood education. *Prerequisite Music 325.* A minimum grade of C is required for certification.

327 Advanced String Class

1 credit. A continuation of 238. *Prerequisite Music 238.* Fall semester.

343 Woodwind Class

1 credit. Methods of tone production, fingerings, care and repair, and methods and materials for teaching flute, oboe, clarinet, bassoon, and saxophone. Fall semester.

344 Woodwind Class

1 credit. A continuation of 343. *Prerequisite Music 343.* Spring semester.

353 Techniques in Therapy

2 credits. Course is designed to introduce behavioral research techniques and how they apply to the uses of music in the therapeutic setting. Students will examine the role music has in altering social and academic behavior in therapeutic applications and in life as a whole. Active participation and research is required. *Prerequisite Music 252.* Fall semester.

354 Research in Music

2 credits. Study of 4 basic research models and an appropriate research prose style. Emphasis on the potential application of experimental and quantitative research techniques to the study of music's effects on behavior. May be taken out of sequence, or as an individual course by non-therapy majors. *Prerequisite music major or permission of instructor.* Spring semester.

371-380 Special Problems

Variable credit. This sequence of courses permits the Department to offer courses to any group of students who express an interest in a particular area of study not a regular part of the curriculum.

415 Classical-Romantic Music Literature

2 credits. (Core) Survey of instrumental and vocal music of the Classical and Romantic periods. *Prerequisite Music 202, or 105, or permission of instructor.* Fall semester.

417 Impressionistic-Modern Music Literature

2 credits. (Core) Survey of music from Impressionism to the present avant-garde styles. *Prerequisite or corequisite Music 202; prerequisite for non-music majors Music 105 or permission of instructor.* Spring semester.

419 Counterpoint

2 credits. A study of contrapuntal techniques of the sixteenth through twentieth centuries through representative composers and original compositions. *Prerequisite or corequisite Music 202.* Spring semester.

431 Piano Methods and Materials

2 credits. Modern methods in teaching piano to children, youth, and adults. Course includes a survey of teaching materials for various stages of progress, teaching demonstrations, and experience. Credit for 431 will be given only upon completion of 432. *Prerequisite two semesters of Music 269.* Alternate years.

432 Piano Methods and Materials

2 credits. A continuation of 431. *Prerequisite Music 431.*

440 Instrumental Arranging

2 credits. Arranging music for concert or marching bands and orchestras. Study of the ranges, limitations, and uses of instruments and their effects in various combinations. *Prerequisite Music 202 or permission of instructor.* Offered on demand.

441 History of Music

3 credits. Survey course with emphasis on the development of musical forms, styles, and media through considering music literature in its cultural environment. *Prerequisite Music 202 or permission of instructor.* Fall semester.

442 History of Music

3 credits. Survey course with emphasis on the development of musical forms, styles, and media through considering music literature in its cultural environment. *Prerequisite Music 202 or permission of instructor.* Spring semester.

455 Music in Therapy I: Principles

3 credits. Survey of experimental studies dealing with the effects of music on behavior, the intervention of music in therapy, and basic therapeutic approaches and techniques. *Prerequisite Music 252, 353, 354; or permission of instructor.*

456 Music in Therapy II: Practices

3 credits. Therapeutic approaches and techniques in music therapy. *Prerequisite Music 455, or permission of instructor.*

471 Student Teaching in Music

12 credits. Teaching experience and observation in elementary and secondary music classes. Instrumental and vocal emphases vary with student strengths and needs. *Prerequisite permission of Department.*

473 Clinical Experience I: Music Therapy

1 credit. Supervised field experience (observation and participation) in an approved clinical facility. Minimum of 30 clock hours total for each clinical experience. Music therapy majors only. *Prerequisite Music 141, 151.*

474 Clinical Experience II: Music Therapy

1 credit. Supervised field experience (observation and participation) in an approved clinical facility. Minimum of 30 clock hours total for each clinical experience. Music therapy majors only. *Prerequisite Music 473.*

475 Clinical Experience III: Music Therapy

1 credit. Supervised field experience (observation and participation) in an approved clinical facility. Minimum of 30 clock hours total for each clinical experience. Music therapy majors only. *Prerequisite Music 474.*

476 Clinical Experience IV: Music Therapy

1 credit. Supervised field experience (observation and participation) in an approved clinical facility. Minimum of 30 clock hours total for each clinical experience. Music therapy majors only. *Prerequisite Music 475.*

477 Clinical Experience V: Music Therapy

1 credit. Supervised field experience (observation and participation) in an approved clinical facility. Minimum of 30 clock hours total for each clinical experience. Music therapy majors only. *Prerequisite Music 476.*

478 Clinical Experience VI: Music Therapy

1 credit. Supervised field experience (observation and participation) in an approved clinical facility. Minimum of 30 clock hours total for each clinical experience. Music therapy majors only. *Prerequisite Music 477.*

479 Professional Internship in Music Therapy

No credit. Six months of supervised practical experience with a registered music therapist in an NAMT approved facility. Taken only after completion of all other music therapy degree requirements. *Prerequisite permission of instructor.*

481-490 Independent Study

Variable credit. The purpose of this class is to offer individual students opportunities for musical composition, arranging, or research under faculty supervision. *Prerequisite permission of instructor.*

APPLIED MUSIC AND ENSEMBLES

Students in applied music advance as rapidly as their abilities permit. In this process they must study technical exercises and literature from various musical periods and styles. Students may register with or without credit for the established music ensembles and for other ensembles organized under faculty supervision; they may repeat the ensembles for credit which they may apply to the fine arts Core requirement. However, to receive credit, students must meet the standards for attendance at rehearsals and public performances established by the faculty director.

268 Voice

1 credit. (Core)

269 Piano

1 credit. (Core) Students with no piano background or limited background will be enrolled in piano class for one or more semesters before enrolling for private piano lessons. Music majors will register for Music 117; non-music majors will register for Music 113.

Note: Music 270-286 each count 1 credit towards Core.

270 Organ**273 Cello****271 Violin****274 String Bass****272 Viola****275 Guitar****276 Flute****277 Clarinet****278 Oboe****279 Bassoon****280 Saxophone****281 Trumpet / Cornet****360 Chamber Music**

½ credit. (Core) General chamber music course from which groups such as Brass Ensemble, String Ensemble, Woodwind Ensemble, Chorale, and Piano Ensemble will be formed as need arises. An opportunity to participate in a variety of mixed chamber music ensembles.

361 Concert Choir

1 credit. (Core) Open to any student; acceptance based upon auditions by appointment. In addition to giving several performances prior to Christmas and participating in the annual Spring Concert, this group sings approximately 20 concerts in churches and schools in Pennsylvania and neighboring states each spring.

362 Choral Union

½ credit. (Core) Mixed vocal ensemble open to any member of the student body (without prior audition) if there are enough members per section to balance the ensemble.

365 Orchestra

1 credit. (Core) Performs three major concerts during the academic year which constitute an invaluable part of musical training in literature and technique of performance. *Prerequisite (for winds and percussion) permission of instructor.*

368 Jazz Band

½ credit. (Core) The Elizabethtown College Jazz Band serves as an integral part of the college curriculum. It functions as a laboratory and as a touring band, playing the best in swing and jazz with the big band sound. Its program of music includes swing, pop tunes, ballads, and jazz, including old standards and current progressive jazz.

369 Concert Band

1 credit. (Core) Open to any qualified student; acceptance subject to approval by director. Performances include the annual winter and spring concerts, and a number of off-campus appearances.

DEPARTMENT OF OCCUPATIONAL THERAPY

Assistant Professor Gordon
Instructors Richert, Sebelist
Field Work Coordinator Fuller

Bachelor of Science

Professional Accreditation: The Department of Occupational Therapy formally received accreditation in 1976 by the American Occupational Therapy Association and the American Medical Association.

The individual who is educated in occupational therapy has developed the ability to find new solutions to health care problems by adapting and using knowledge which is rooted in both the liberal arts and professional traditions. The student in occupational therapy engages in a program that integrates the humanities and the behavioral and physical sciences with professional study, thereby reflecting the liberal arts and community service traditions of Elizabethtown College. This distinctive combination of courses enriches the student's background, and produces therapists who are sensitive, creative, and curious about new ideas.

This emphasis on the importance of both the humanities and the sciences in preparing for professional life is further manifest in the two philosophical approaches which shape the Department's program. On the one hand, the Department stresses the importance of a precise knowledge about human development—the biophysical and psychological processes which operate in every individual. On the other hand, the Department stresses that cultural anthropology—an awareness of the significance of man's broader social patterns and cultural environments—is equally necessary if one is to understand individuals and successfully deal with their cultural and developmental impairments.

Occupational therapy majors must take Occupational Therapy 113, 114, 211, 213, 214, 215, 216, 217, 225, 302, 307, 311, 317, 318, 370, 411, 412, 413, 415, 416, 417, 418; Chemistry 101, 104; Biology 111, 201, 202, 202L; Psychology 105, 225; and Anthropology 102 or 311. Mathematics 151 and either Psychology 235, 321 or 322 are strongly recommended.

ACADEMIC AND FIELD WORK EDUCATION

The occupational therapy program comprises a four-year course of classroom study and at least six months of field work education. The student may elect one of three options:

First Option: The student may complete three years of academic work followed by three months of level-II field work experience during the summer between the junior and senior years. The student will then complete the senior academic year followed by three months of level-II field work the next summer.

Second Option: The student may complete four years of academic work followed by six months of level-II field work experience.

Third Option: The student may complete the entire program in four years by taking two especially designated senior-level courses in the spring semester of the junior year. The student will complete three months of level-II field work in the summer following the junior year and will finish the remaining classroom studies during the fall semester of the senior year. The student will then complete three months of level-II field work experience during the spring semester of the senior year.

ADDITIONAL FIELD WORK EDUCATION

After completing the required six months of level-II field work, the student may elect to complete an additional level-II field work and may pursue this study in areas such as pediatrics, mental retardation, gerontology, home health, hand rehabilitation, sensory integration, school system, advanced psychosocial or physical rehabilitation, research, administration, and education.

NATIONAL CERTIFICATION EXAMINATION

Upon being awarded the degree in occupational therapy, the student is eligible to sit for the national certification examination, held twice a year, usually on the last Saturdays in June and January.

ADMISSION REQUIREMENTS FOR DEPARTMENT

1. *Prior to admission into the Department*

- a. The student will submit an application to the Director of Admissions before December 1 of the year prior to the anticipated date of matriculation. Students are admitted into the program in the fall semester only.
- b. The student will have an interview with a member of the Occupational Therapy Department in order to determine eligibility.
- c. The occupational therapy faculty will select the students for the next academic year and submit their names to the Director of Admissions.

2. *Evaluation after admission into the Department*

- a. Admission into the Department of Occupational Therapy does not imply that a student will be guaranteed completion of the entire course of study nor that he will be eligible to sit for the certification examination. The student will be reviewed by a faculty evaluation committee at the conclusion of each academic year. If the committee believes that a student is not suitable academically or professionally for the area of study, the student will be counseled into other areas of endeavor. In order to remain in the Department the student must maintain the following standards:

- (1) The student must have at least a 2.5 average in all courses required for the major (both occupational therapy and related requirements).
- (2) The student must satisfactorily meet the standards and requirements in all phases of field work education (including level-I field work, laboratory, and level-II field work experience).

The curriculum in occupational therapy may be subject to revision during the period 1982–84.

113 Basic Concepts in Occupational Therapy

3 credits. An introduction to the theoretical basis for the practice of occupational therapy. The historical importance of purposeful and creative activity suitable for the human being; the cultural and developmental use of activity to foster normal development and to treat emotional and physical dysfunction. Related field trips. Fall semester.

114 Basic Concepts in Occupational Therapy

3 credits. A continuation of 113 emphasizing the treatment concepts, theories, and skills which constitute the wide areas in which occupational therapy finds its present and potential contributions to health care. Spring semester.

211 Introduction to Material Culture: Developmental Laboratory

1 credit. A series of discussion and laboratory sessions designed to help the student understand how activities (from 0–12 years) related to human development and cultural anthropology apply directly to the concepts behind occupational therapy. Fall semester.

213 Introduction to Material Culture: Textiles

1 credit. Instruction in textiles, including practice in creative problem solving as it relates to occupational therapy. Graded pass, no pass. Fall semester.

214 Introduction to Material Culture: Multimedia/Graphics

1 credit. Instruction in graphics and minor skills with emphasis on their therapeutic application to occupational therapy. Graded pass, no pass. Spring semester.

215 Introduction to Material Culture: Pottery

1 credit. Instruction in the basic and major skills of pottery with emphasis on the therapeutic value. Graded pass, no pass. Fall semester.

216 Introduction to Material Culture: Wood

1 credit. Instruction in the theory and practice of wood, basic hand tools, and power equipment as treatment media. Graded pass, no pass. Spring semester.

217 Kinesiology

3 credits. The principles of functional anatomy, with emphasis on normal and abnormal human motion, and how it is affected by cultural, mechanical, psychological, and physiological factors. *Prerequisite Biology 201, permission of instructor.* Spring semester.

225 Human Development Laboratory

2 credits. Refer to Psychology 225 for lecture description. The laboratory concentrates on reflexive motor behavior with emphasis on the cognitive, emotional, sociocultural areas from early developmental years. *Corequisite Psychology 225.* Fall semester.

302 Perspectives in Pediatrics

3 credits. An overview of pediatric conditions as they relate to the child and family, with emphasis on occupational therapy theories and methods (activity analysis, evaluation, and treatment), and the therapeutic relationship with the child from birth to puberty. *Prerequisite permission of instructor.* Spring semester.

307 Neurobehavioral Science I: Neurology

3 credits. A review of basic neuroanatomy and neurophysiology with emphasis on the functional neuronal systems (motor, sensory, limbic), clinical conditions, and therapeutic treatment. *Prerequisite or corequisite Biology 201, 202, 202L, 317.* Fall semester.

311 Neurobehavioral Science II: Anthropological Perspectives in Psychiatry

3 credits. The course uses the anthropological perspective to examine psychiatry within its cultural context. Primary focus on North American culture with some cross-cultural comparisons. Fall semester.

317 Psychosocial Rehabilitation

4 credits. An examination of major psychiatric concepts relevant to occupational therapy, with emphasis on theory application, utilizing evaluation tools, goal planning, activity analysis, treatment methods, group techniques, and level-I field work experience. *Prerequisite permission of instructor.* Fall Semester.

318 Physical Rehabilitation

5 credits. The use of neurodevelopmental, biomechanical, and rehabilitative evaluations and treatment intervention strategies to enhance the quality of life for individuals with major physical disabilities. Medical lectures, laboratory, and level-I field work experience. *Prerequisite permission of instructor.* Spring semester.

370 Special Topics

1 credit. Using concepts from physical and psychosocial rehabilitation courses, the laboratory integrates theory and practice. Major focus on independent problem solving and practice of those skills necessary for level-II field work. *Prerequisite or corequisite Occupational Therapy 317, 318.*

411 Advanced Concepts with Material Culture

3 credits. The development of skills in the organization and administration of an occupational therapy department; the structure of the professional association and its relationship to national health care systems. Fall semester.

412 Senior Practicum

3 credits. The course offers graduating seniors the opportunity to conduct scholarly research within an area of their major. Fall and spring, dependent upon student's date of graduation.

413 Sensory Integration

4 credits. Comprehensive study of the sensory integration of the central nervous system, emphasizing standardized evaluation procedures, sensory integrative disorders, remediation techniques within a developmental framework. Lecture, laboratory, and level-I field work. *Prerequisite permission of instructor.* Fall semester.

**415 Advanced Concepts in O.T. and Health
Care I: Behavior Biofeedback
Treatment Application**

1 credit. Instruction in learning and teaching to others the use of biofeedback apparatus, procedures, and theory as an adjunctive clinical tool with emphasis on behavioral treatment and problem-solving techniques. Fall semester.

**416 Advanced Concepts in O.T. and Health
Care II: Health Care Systems**

1 credit. A study of the various components of local and national health care service systems, with some discussion of health care in foreign cultures. Spring semester.

**417 Advanced Concepts in O.T. and Health
Care III: Spanish for the Health Professional**

1 credit. Intensive instruction in the development of fundamental skills in Spanish conversation pertinent to the health care professional. Fall semester.

**418 Advanced Concepts in O.T. and Health
Care IV: Movement Awareness, An
Interpersonal Communication Code**

1 credit. Personal and professional therapeutic techniques used to identify, through body movement and expression, one's physiological, emotional, and creative characteristics. Techniques include isolation, flexibility, relaxation, and body conditioning exercises. Spring semester.

PHILOSOPHY

See Department of Religion and Philosophy, page 87.

**DEPARTMENT OF PHYSICAL
EDUCATION AND HEALTH**

Professor Wright

Associate Professor Ober (*Chairman and Athletic Director*)

Assistant Professors Garrett, Kauffman, Smith, Whitmore

The Department of Physical Education and Health affords an opportunity for all students to develop an interest in play and recreation which will be fun and worthwhile to them during college and later life. We strive to develop social and moral standards such as sportsmanship, teamwork, tolerance, and other character benefits which come from properly conducted play.

All students at Elizabethtown College are required to take four semester hours of physical education courses of which two may be taken in aquatics. Students must take at least one semester of an aquatics activity or successfully complete a proficiency test in swimming. The remaining physical education requirements may be satisfied by electing any of the courses offered except Physical Education 275 and 285. No more than six semester hours of physical education may count towards the 128 hours required for graduation from the College. Physical Education 270 counts as three credits towards graduation, but only one activity towards Core.

105 Beginning Swimming (women)

1 credit. (Core) Elementary-level instruction in the basic strokes for non-swimmers.

115 Intermediate Swimming (women)

1 credit. (Core) Instruction in the techniques of the basic strokes; survival swimming and water safety.

125 Beginning Swimming (men)

1 credit. (Core) Elementary-level instruction in the basic strokes for non-swimmers.

135 Intermediate Swimming (men)

1 credit. (Core) Instruction in the techniques of the basic strokes; survival swimming and water safety.

145 Field Hockey-Volleyball (women)

1 credit. (Core) Rules, playing techniques, and skill development.

150 Adapted Physical Education

1 credit. (Core) Individual activity or corrective exercises adapted to the needs and abilities of the student. Graded pass/no pass. *Prerequisite recommendation of a physician.*

155 Tennis-Bowling (coed)

1 credit. (Core) Rules, playing techniques, and skill development.

160 Adapted Physical Education

1 credit. (Core) Individual activity or corrective exercises adapted to the needs and abilities of the student. Graded pass/no pass. *Prerequisite recommendation of a physician.*

165 Golf-Badminton (coed)

1 credit. (Core) Rules, playing techniques, and skill development.

185 Basketball (women)

1 credit. (Core) Rules, playing techniques, and skill development.

195 Basketball-Soccer (men)

1 credit. (Core) Rules, playing techniques, and skill development. Fall semester.

205 Archery-Badminton (coed)

1 credit. (Core) Rules, playing techniques, and skill development.

210 Basketball (men)

1 credit. (Core) Rules, playing techniques, and skill development. Spring semester.

215 Sports Appreciation (coed)

1 credit. (Core) A study of the important role which sports play in our society.

217 Senior Life Saving

1 credit. (Core) Instruction and practice in life saving, water safety, and pool management. Meets Red Cross certification requirements. Graded pass/no pass.

218 Water Safety Instruction (coed)

1 credit. (Core) Advanced life saving skills, swimming instruction, and use of pool equipment. Meets Red Cross Instructor certification requirement. Graded pass/no pass. *Prerequisite current Senior Life Saving Certificate.*

225 Tennis (women)

1 credit. (Core) Rules, playing techniques, and skill development. Fall semester.

235 Tennis (men)

1 credit. (Core) Rules, playing techniques, and skill development. Fall semester.

240 Bowling

1 credit. (Core) Rules, playing techniques, and skill development.

245 Racquetball (women)

1 credit. (Core) Rules, playing techniques, and skill development.

250 Volleyball (coed)

1 credit. (Core) Rules, playing techniques, and skill development.

255 Handball-Racquetball (men)

1 credit. (Core) Rules, playing techniques, and skill development.

260 Adapted Physical Education

1 credit. (Core) Individual activity or corrective exercises adapted to the needs and abilities of the student. Graded pass/no pass. *Prerequisite recommendation of a physician.*

265 Physical Conditioning (coed)

1 credit. (Core) Techniques of exercise, jogging, weight-training, and body development.

270 Advanced Individual Sports

3 credits. (One hour only counts for Core.) Methods, techniques, and teaching skills in selected sports. Summer session only.

275 Contemporary Health Problems

3 credits. A study of contemporary physical, mental, and social aspects of personal and community health problems. Educational principles applied to teaching in the elementary school.

285 Physical Education for the Elementary School Child

3 credits. A study of the physical growth of children from ages 4–12, with consideration of games and activities appropriate to the physical development of the child in the elementary grades.

290 Interpretive Dance Theory (coed)

1 credit. (Core) The development of an awareness of the body as an instrument which can communicate ideas, thoughts, and emotions through dance. Priority given to music therapy majors. Fall semester.

295 Introduction to Body Movement and Dance Form (coed)

1 credit. (Core) Disciplines of ballet and muscular control.

370–380 Special Topics in Physical Education (coed)

1 credit. (Core) These courses may include such physical activity courses as horsemanship, bicycling, self-defense techniques, skiing, and so forth, for which there will likely be an extra charge. Graded pass/no pass.

481–490 Self-Directed Physical Education Activity

1 credit. (Core) Designed for the student who attends Evening Division or studies abroad, or who has extenuating circumstances which prohibit him from meeting regularly scheduled physical education classes. Graded pass/no pass.

DEPARTMENT OF PHYSICS AND EARTH SCIENCE

Associate Professors Bowman, Custer
(*Chairman*), Thompson

Bachelor of Arts; Bachelor of Science

Programs in the Department of Physics and Earth Science are designed to convey an appreciation and understanding of physical and natural systems and to prepare students for professional careers in contemporary society. In accord with the philosophy that both majors and non-majors should be broadly exposed to studies of natural phenomena, the Department offers a wide variety of formal courses and informal learning experiences, many of which are intended to develop students' abilities for continuing self-education. Analysis, problem solving, and hands-on experience are emphasized at all instructional levels.

Students majoring in department programs commonly go on to careers in physics, engineering, computer technology, and teaching, or to graduate school.

The Department offers three programs: 1) a Bachelor of Science in Physics, 2) a cooperative program in engineering at the completion of which the student is awarded a bachelor of science degree from The Pennsylvania State University and a bachelor of arts degree from Elizabethtown College, and 3) a secondary general science concentration.

Physics majors are required to take Physics 132, 231, 232, 343, 404; Chemistry 101, 104; Mathematics 121, 122, and 222. Those planning on graduate study or work in industry must also take Physics 305, 306, 344, 345, 403, 407, 408, 490; and six credits of electives from Mathematics 201, 321, 322, 351, or 362. Those planning to certify to teach physics at the secondary level must take Biology 105; and 106 or 108; Computer Science 115; Education 215, 225d, 225e, 305, 472; and six credits of electives from the offerings of the Department of Physics and Earth Science.

Majors in engineering will complete three years at Elizabethtown College and two years at The Pennsylvania State University. To be eligible for admission at The Pennsylvania State University, a student must have a 2.3 cumulative average at Elizabethtown College and be recommended by Elizabethtown College. Students who have studied at The Pennsylvania State University prior to matriculation at Elizabethtown College must have a quality point average of at least 2.5 for all college work taken. At

Elizabethtown College the student will complete Physics 132, 231, 232, 305, 306, Drawing 115, 116; Mathematics 121, 122, 222; Chemistry 101, 104; and other courses required for the specific field of engineering chosen. A student recommended for transfer to the Pennsylvania State University will be eligible to enter any of the following engineering curricula provided they have maintained the indicated quality point average: 3.0 (chemical, civil, electrical, mechanical, and engineering science); 2.50 (aerospace, agricultural, environmental, industrial, mining, nuclear, petroleum and natural gas, metallurgy, and ceramic science).

Students in the general science certification program can choose a concentration in physics. Those interested in the program should consult the detailed description in the interdisciplinary section of this catalog, page 93.

PHYSICS

111 Introduction to Physics

4 credits. (Core) Introduction to the concepts of physics through a study of the laws of motion, energy, electricity, light, relativity, radioactivity, and other topics of interest. Hours: lecture 3, laboratory 2. Fall semester.

203 General Physics I

4 credits. (Core) First semester of a comprehensive study of the principles of physics with applications and instrumentation. Topics include mechanics, waves, sound, light, optics, and electricity. Hours: lecture 3, laboratory 2. *Prerequisite Mathematics 101.* Fall semester.

204 General Physics II

4 credits. (Core) Continuation of 203. Topics include heat, radioactivity, and magnetism. Hours: lecture 3, laboratory 2. *Prerequisite Physics 203.* Spring semester.

132 College Physics I

4 credits. (Core) First of a three-semester series which investigates basic principles of physics using differential and integral calculus. Topics include measurement, Newton's laws, impulse-momentum, work energy, linear and rotary concepts, equilibrium of rigid bodies, and oscillations. Hours: lecture 3, laboratory 2. *Corequisite Mathematics 121.* Spring semester.

231 College Physics II

4 credits. (Core) Second of a three-semester series which investigates basic principles of physics using differential and integral calculus. Topics include gravitation, fluid dynamics, waves, sound, thermodynamics, charge and electric fields. Hours: Lecture 3, laboratory 2. *Prerequisite Physics 132; corequisite Mathematics 122.* Fall semester.

232 College Physics III

4 credits. (Core) Third of a three-semester series which investigates basic principles of physics using differential and integral calculus. Topics include electricity, magnetism, light, and introductory quantum physics. Hours: lecture 3, laboratory 2. *Prerequisite Physics 231, corequisite Mathematics 122.* Spring semester.

305 Introduction to Theoretical Mechanics I

3 credits. (Core) Introduction to vector analysis, conditions of equilibrium, coordinate systems, cables, virtual work, and oscillating systems; emphasis on problem solving. *Prerequisite Physics 232, Mathematics 222.* Fall semester.

306 Introduction to Theoretical Mechanics II

3 credits. (Core) Study of motion of systems of particles, motion of rigid bodies, particles in a central force field, accelerated coordinate systems, and the application of Lagrange's Equations; emphasis on problem solving. *Prerequisite Physics 305.* Spring semester.

333 Computer Systems Interfacing (Chemistry 333, Physics 333)

3 credits. Digital logic and integrated circuits to implement logic; architecture and machine language programming of minicomputers and microprocessors; design, testing, and construction of instrument-to-computer and computer-to-computer interfaces; design and testing of supporting software. Spring semester.

343 Introduction to Quantum Theory (Chemistry 343)

3 credits. (Core) Introduction to the principles of quantum theory, radiation, atomic spectra, and the extranuclear structure of the atom. *Prerequisite Physics 232, Mathematics 222.* Fall semester.

344 Modern Physics

3 credits. (Core) Introduction to nuclear and atomic processes. Topics include radioactivity, the nuclear force, nuclear interactions, quantum statistics, solid state applications, and elementary particles. *Prerequisite Physics 343.* Spring semester.

345 Advanced Physics Laboratory

2 credits. (Core) Advanced laboratory with experiments in modern physics, electricity and magnetism, optics, and thermodynamics; employs a variety of experimental techniques. *Prerequisite Physics 343.* Spring semester.

370-379 Special Topics in Physics

Variable credit. (Core) Study of an advanced topic, experimental or theoretical, of special interest to the student. *Prerequisite permission of instructor.*

403 Kinetic Theory and Thermodynamics

3 credits. (Core) Study of the kinetic theory of matter, statistical mechanics, and the principles of thermodynamics, including temperature, heat, work, internal energy, entropy, and enthalpy. *Prerequisite Physics 232, Mathematics 222.* Fall, alternate years.

404 Electronics

4 credits. (Core) Practical and theoretical study of fundamental components and circuits, including transistors, diodes, integrated circuits, electron beams, filters, amplifiers, control circuits, and some digital electronics. Hours: lecture 3, laboratory 3. Fall, alternate years.

407 Electricity and Magnetism I

3 credits. (Core) First of a two-semester sequence dealing with static and time dependent, electric and magnetic fields, electronic components, measurements, and properties of matter. Topics include vector calculus solutions of field equations, boundary conditions, network theory, electrical properties of matter, and basic properties of static magnetic fields. *Prerequisite Physics 232.* Fall, alternate years.

408 Electricity and Magnetism II

3 credits. (Core) Continuation of 407. Topics include magnetic properties of matter, time dependent fields, Maxwell's equations, radiation, and special relativity. *Prerequisite Physics 407.* Spring, alternate years.

481-489 Independent Study

Variable credit. (Core) Study and experimentation in an area of interest to the student and faculty member. *Prerequisite permission of instructor.*

490 Seminar

2 credits. (Core) directed experimental or theoretical study requiring faculty acceptance of proposal and a final formal report of work. *Prerequisite permission of instructor.*

DRAWING**115 Graphics and Descriptive Geometry**

2 credits. Study of engineering-related drawing, including projection systems, lettering, sketching, pictorial drawing. Descriptive drawing will include three-dimensional problems whose solution requires change in position and rotation. Students must provide themselves with suitable drawing equipment. Hours: lecture 1, laboratory 5, Fall semester. Students will be required to take and pay the fees for graphics through correspondence courses offered by The Pennsylvania State University and approved as part of transferable work to that institution.

116 Graphics and Descriptive Geometry

2 credits. A continuation of 115. Topics include intersection of objects, vectors, and graphs. The student will elect and solve an original design problem approved by the instructor. Hours: lecture 1, laboratory 5. *Prerequisite Drawing 115.* Spring semester. Students will be required to take and pay the fees for graphics through correspondence courses offered by The Pennsylvania State University and approved as part of transferable work to that institution.

Education 305 Practicum in Secondary Education: Science

4 credits. Teaching science in secondary schools. *Prerequisite Psychology 105; corequisite Education 225d.*

EARTH SCIENCE**105 Field Earth Science**

8 credits. (Core) Intensive introductory program of field and laboratory studies emphasizing in situ instruction. Includes geologic and topographic mapping, and investigations of the earth and atmosphere. *Prerequisite permission of instructor.* Summer sessions.

107 Astronomy

4 credits. (Core) General principles of solar system and stellar astronomy; laboratories provide practical experience in determining astrometric quantities. Algebra is used to treat topics throughout the course. Hours: lecture 3, laboratory 2.

108 Meteorology

4 credits. (Core) General studies of causes, effects, and distribution of atmospheric phenomena. Laboratories include collection and analysis of weather and climatic data. Hours: lecture 3, laboratory 2. Fall and spring semesters.

111 Physical Geology

4 credits. (Core) Study of the physical earth incorporating its materials, processes, and forms. Topics include minerals, rocks, volcanoes, glaciers, earthquakes, and plate tectonics. Hours: lecture 3, laboratory 2. Spring semester.

112 Historical Geology

4 credits. (Core) Study of the history of the earth and its life forms, as well as methods utilized to decipher the earth's past. Hours: lecture 3, laboratory 2. *Prerequisite Earth Science 111.* Fall semester.

301 Mineralogy/Petrology

3 credits. (Core) Introduction to systematic crystallography and mineralogy, stressing identification and associations. Igneous and metamorphic petrology includes genetic processes, and microscopic and hand specimen petrography. Hours: lecture 2, laboratory 2. *Prerequisite Earth Science 111 and permission of department chairman.*

370-379 Special Topics in Earth Science

Variable credit. (Core) Study of an advanced topic, experimental or theoretical, of special interest to the student. *Prerequisite permission of instructor.*

481-489 Independent Study

Variable credit. (Core) Students are required to define and do significant research on a problem in the earth sciences.

DEPARTMENT OF POLITICAL SCIENCE

Associate Professors Lamontagne, Selcher
(*Chairman*)

Assistant Professor McDonald

Bachelor of Arts

Through the liberal arts blend of social science and the humanities which is political science today, the Department seeks to assist the student in thinking clearly and logically about political questions facing the community, state, nation, and world. The Department perceives three principle approaches to the discipline: the normative approach considers the values and ethical choices inherent in public policy; the empirical approach employs techniques to analyze how political systems function; the policy-oriented approach encourages the individual to responsible and informed action as citizen, government official, lawyer, or businessman. A major in political science provides preparation toward a career in party or interest group politics, law, public administration, regional and urban planning, personnel and public relations, teaching, publishing, communications, the diplomatic corps, political research, and consulting, among others. Beyond its worth in career terms, the study of politics and government can lead to more effective pursuit of one's political interests as a civic responsibility or as an avocation.

The major in political science requires the following courses which comprise the principal subfields of the discipline: Political Science 117, 118, 202, 205, 301, 308, and 330. Outside the department, Mathematics 151 and Sociology 331 are required. The remaining 12 hours may be chosen from any combination of department offerings for a total of 33 hours of political science courses. General electives from the other social sciences are encouraged.

The Department participates in **the secondary school certification in social studies program** and **the forestry and environmental management major**, offering a political science concentration in each. Students with interests in these areas should consult the detailed descriptions in the interdisciplinary section of this catalog, page 93.

105 Introduction to Government

3 credits. (Core) The functions and differing types of government, emphasizing the relationship between the individual and the government in democratic, authoritarian, and totalitarian systems.

117 American Political Institutions I

3 credits. (Core) Evolution of U.S. political institutions since independence with emphasis on the executive, legislative, and judicial branches in the context of current developments.

118 American Political Institutions II

3 credits. (Core) Continuation of U.S. national government with emphasis on public opinion, elections, ethnic politics, and federalism. State and local politics are also discussed. *Prerequisite: Political Science 117.*

202 Political Theory

3 credits. (Core) Analysis of the development of significant political ideas from the Greek city-state to the present. Spring semester.

205 International Relations

3 credits. (Core) Survey of political, economic, legal, psychological, and military features of international relations with consideration of national interest, foreign policy, diplomacy, alliances, and balance of power.

301 Comparative Governments

3 credits. (Core) A comparison of the structures and functions of the political systems of selected foreign nations, emphasizing the historical development of party systems, political cultures, and executive-legislative relations. Fall semester.

303 Political Parties and Interest Groups

3 credits. (Core) Contemporary American party politics: basic definitions and popular stereotypes, the practical functioning framework, organization, and operation; the major problems. *Prerequisite: Political Science 105 or 117.* Spring semester.

305 American Foreign Policy

3 credits. (Core) Analysis of United States foreign relations since World War II, with emphasis on the development of current major issues, the domestic and bureaucratic politics of foreign relations, and policy options in current and future problems.

308 Public Administration

3 credits. (Core) A study of administrative organization, personnel administration, decision-making, and communications, with emphasis on the relation of administrative bureaus to the public, the executive office, the legislature, and the judiciary. Fall semester.

327 Latin American Politics

3 credits. (Core) Political culture and processes, with country studies and developmental models to illustrate political styles and approaches to current issues. Fall semester.

330 Research Methods (Sociology 330, Social Work 330)

3 credits. Techniques of empirical political research and the development of modern methods of analysis and data presentation in political science, with reference to contributions from other social sciences. A major research project on methodology is required. Fall semester.

342 Politics of Developing Nations

3 credits. (Core) An analysis of interdisciplinary theories of political development with application to specific case studies of contemporary nation-building in transitional societies. Spring semester.

370-379 Special Problems

3 credits. (Core) Topical areas and problems of political science; subjects chosen in accord with student demand.

381 The Political Novel

3 credits. (Core) Political values as reflected in fiction. The student will be encouraged to confront his own political values and the values of others. *Prerequisite: permission of instructor.* Fall semester.

401 Constitutional Law

3 credits. (Core) History and development of the Constitution. Evaluation of leading Supreme Court decisions with emphasis on current decisions and cases in the light of history and of possible future trends. Fall semester.

412 Citizen Politics

3 credits. (Core) A practical politics course, geared to enhancing citizen effectiveness at all levels of government. *Prerequisite: permission of instructor.* Spring semester.

471 Capitol Semester Internship

6 credits. Applied field experience in public administration as a junior assistant in the daily operations of state or local government agencies. *Prerequisite: Political Science 308 and permission of instructor.* Spring semester.

480-489 Independent Study

Variable credit. Designed to offer independent study to advanced students, making use of techniques of political science in specific problem areas not included in the Department's regular offerings.

DEPARTMENT OF PSYCHOLOGY

Associate Professors Dennis, Ellsworth
(*Chairman*)

Assistant Professors McLaughlin, Sagar

Bachelor of Arts; Bachelor of Science

The Psychology Department provides a liberal arts education, preparation for careers in human services and education, and preparation for graduate and professional training in clinical, experimental and applied psychology, and related fields. The student learns the principles and theories of psychology as currently understood and acquires the ability to derive new principles. The student is required to participate in topical and methodological studies and may participate in field experience and research and their evaluation.

The Department offers two degree programs: one leading to the Bachelor of Arts in Psychology, and one leading to the Bachelor of Science in Psychology, these programs differing mainly in their General Education Core requirements. In addition, a psychology concentration is offered for students pursuing the secondary education certification in social studies; see the interdisciplinary section of this catalog, page 93, for details.

Courses required for both the Bachelor of Arts and the Bachelor of Science degrees are Psychology 105, 106, 213, 218, 221, 317, 402, 413 or 414, and 425 or 435; psychology electives for a minimum of 33 credit hours and eight credit hours of biology. For the Bachelor of Arts degree, the student is also required to complete six credit hours of intermediate language or to demonstrate equivalent competency; for the Bachelor of Science degree, the student is also required to complete six credit hours of mathematics and three credit hours of computer science.

105 General Psychology

3 credits. (Core) An introduction to the principles of behavioral science including consideration of motivation, learning, personality, and sensory and perceptual processes.

106 Experimental Psychology

4 credits. (Core) An examination of the empirical and logical bases of psychological theories of perception, learning, memory and thinking, and motivation and emotion. Laboratory exercises provide evidence for contemporary psychological theories. Hours: lecture 3, laboratory 2. *Prerequisite Psychology 105*. Spring semester.

213 Research Methods

4 credits. (Core) An introduction to the methods of psychology. Emphasis on research design and data analysis as the basis for evaluating psychological literature. Consideration is given to the philosophy of science. Hours: lecture 3, laboratory 2. *Prerequisite Psychology 106*. Fall semester.

215 Industrial and Organizational Psychology

3 credits. (Core) An introduction of the principles of psychology involving the problems of people at work; topics include personnel selection, training, performance evaluation, motivation, and human factors research. *Prerequisite Psychology 105*. Offered on demand. Note: credit will not be granted for Psychology 215 if credit has already been granted for Business Administration 369.

218 Psychological Statistics

3 credits. (Core) A discussion of psychological statistics, emphasizing analysis of variance, varieties of correlation, errors of measurement, and selected non-parametric procedures. *Prerequisite Psychology 213*. Spring semester.

221 Theories of Personality

3 credits. (Core) A critical survey of the major theories of personality, including psychoanalytic, humanistic, trait, and behavioral approaches. *Prerequisite Psychology 105*. Fall semester.

225 Developmental Psychology

3 credits. (Core) An introduction to physical, perceptual, linguistic, intellectual, and social-emotional human development, covering the periods of infancy, childhood, adolescence, adulthood, and old age. *Prerequisite Psychology 105*.

235 Social Psychology

3 credits. (Core) An introduction to the processes by which the social environment influences human thought, feelings, and behavior, providing coverage of such topics as conformity, prejudice, aggression, pro-social behavior, attraction, and love. *Prerequisite Psychology 105*.

317 Learning

4 credits. (Core) Study of major theories, methods, and empirical findings in the area of both human and animal learning. Students conduct various animal conditioning experiments. Hours: lecture 3, laboratory 2. *Prerequisite Psychology 213.* Fall semester.

322 Abnormal Psychology

3 credits. (Core) A study of neuroses, psychoses, and personality disorders with an emphasis upon examining case material in detail. Attention is given to diagnosis, empirical findings regarding etiology and treatment, and to psychoanalytic, behavioral, and existential theories of psychopathology. *Prerequisite Psychology 105.* Spring semester.

333 Tests and Measurements

3 credits. (Core) An introduction to the standardization, validity, and reliability of psychological tests, including the study of standardized tests and their interpretation. Hours: lecture 2, laboratory 2. *Prerequisite Psychology 105.* Spring semester.

334 The Exceptional Child

3 credits. (Core) A survey of the research and theories on the physical, intellectual, and social-emotional deviations of children, including an examination of both psychologically handicapped and gifted children. *Prerequisite Psychology 225 or permission of instructor.* Spring semester.

370-379 Special Problems in Psychology

Variable credit. (Core) Directed study of topics not otherwise covered in the curriculum. Offered when student interest and faculty availability justify. *Prerequisite permission of instructor.*

401 Counseling Psychology

3 credits. (Core) A review of current theories, research, and techniques of counseling. Relevant to students planning careers in various areas of social and psychological services. *Prerequisite Psychology 322, or permission of instructor, or both.* Fall semester.

402 History and Systems of Psychology

3 credits. (Core) A study of major historical systems in psychology, including the evolution of various positions in contemporary psychology and attempts to reconcile these positions. *Prerequisite Psychology 213.* Fall semester.

413 Perception

3 credits. (Core) A study of the theories and empirical findings in the area of sensory and perceptual functioning with emphasis upon visual processing. Students will be expected to conduct a research project. *Prerequisite Psychology 213 or permission of instructor.* Fall, 1982.

414 Memory and Thinking

3 credits. (Core) A study of the theories and empirical findings in the areas of the acquisition and retrieval of information, concept formation, and problem solving. Students will be expected to conduct a research project. *Prerequisite Psychology 213 or permission of instructor.* Spring, 1982.

425 Advanced Developmental Psychology

3 credits. (Core) A study of the developmental theories of psychological abilities, traits, and processes, including a critical review of relevant empirical evidence. Students will be required to conduct a research project. *Prerequisite Psychology 213 and 225, or permission of instructor.* Fall, 1981.

435 Advanced Social Psychology

3 credits. (Core) A critical examination of selected areas of social psychological research with attention to methodological issues and social relevance. Students will participate in original research. *Prerequisite Psychology 213 and 235, or permission of instructor.* Spring, 1983.

475 Field Study

4 credits. Supervised training and experience in a professional setting related to psychology, generally for two afternoons a week, plus weekly meetings with faculty members. Placement depends on student interest and goals, and availability of professional setting. *Prerequisite Psychology 401 or permission of instructor.*

480-489 Independent Study in Psychology

Variable credit. (Core) This course offers the mature student the opportunity independently to pursue educational experiences not otherwise available in the curriculum. *Prerequisite permission of instructor.*

491-492 Research Practicum

Variable credit. (Core) Research in psychology under the close supervision of a faculty member. Subjects for research are chosen in an area of interest to both persons. Offered by individual faculty-student arrangement. *Prerequisite Psychology 213, permission of instructor.*

**DEPARTMENT OF RELIGION
AND PHILOSOPHY**

Professors Clemens (*Chairman*), Puffenberger,
Ritterspach, Snowden, Sutphin

Bachelor of Arts

Considering the heritage of religion and philosophy, the Department seeks to broaden the student's liberal arts curriculum by pursuing creative ventures which often cross over traditional disciplinary lines. While committed to the Judaeo-Christian tradition, the Department does not profess a single denominational consensus; it operates in the midst of a complex and pluralistic religious field. The Department encourages in the student a reflective stance which focuses on the basic philosophies, value systems, and faith expressions of mankind as means of preparing the student for seminary, graduate school, social work, counseling, and journalism, among other fields.

A major shall complete 33 hours of course work in the Department beyond the six hours required in the General Education Core. At least 27 hours of this course work must be above the 100-level. All majors will be required to complete a six-hour senior research project to be supervised and read by at least two members of the Department.

Students seeking a double major shall complete 24 hours of course work in the Department beyond the six hours required in the General Education Core. At least 18 hours of this course work must be above the 100-level and must include one three-hour Independent Study (Religion or Philosophy 480–89). Students who desire a double major shall declare their intentions to the Department during their junior year.

RELIGION

105 The Bible: Themes and Issues

3 credits. (Core) An introduction to the scriptures of Judaism and Christianity with special emphasis upon their original setting in life. An important aspect of the course is familiarization with techniques of Bible study.

115 Religions of the Modern World

3 credits. (Core) An exploration of the experiential meaning of "religion," as well as some of its classical statements, interpretations, and traditions. A survey of various Eastern and Western religious traditions from phenomenological, cultural, and comparative points of view.

125 Contemporary Religious Issues

3 credits. (Core) A constantly changing survey of relevant problems and issues on the contemporary religious scene with primary emphasis upon the thought patterns rather than the institutional forms of the Judaeo-Christian faith.

201 Introduction to the History, Literature, and Faith of Israel

3 credits. (Core) A study of the history of Israel as a basis for understanding the literature of the Old Testament and Biblical ways of faith; an introduction to the various tools of Biblical criticism. Fall semester.

202 Introduction to the History, Literature, and Faith of Christianity

3 credits. (Core) A survey of New Testament history, an orientation to the literature of the New Testament, and an appreciation of the conditions which gave rise to Christianity. Spring semester.

221 Western Religions

3 credits. (Core) A study of the major religions of the Near East and the Western hemisphere. Primary emphasis on a historical and comparative study of Judaism, Christianity, and Islam. Fall semester.

222 Eastern Religions

3 credits. (Core) A sympathetic encounter with the major living religions of the Far East with emphasis upon understanding their diverse cultural expressions through comparative study: Hinduism, Buddhism, Jainism, Confucianism, Taoism, Sikhism, and Shinto. Spring semester.

230 Religion in America

3 credits. (Core) A study of the rich diversity of religious America within the setting of the larger cultural and social experience. Emphasis on the uniquely American religious experience, and the identity and integrity of each separate tradition.

231 Contemporary Theology

3 credits. (Core) A deeper exposure to some aspect of theological thinking or to the study of a particular theologian or group of theologians. Religion 125 recommended. Fall, alternate years.

301 New Testament Greek I

3 credits. An introduction to the fundamentals of reading *koine* Greek, the language of the New Testament. Fall semester.

302 New Testament Greek II

3 credits. A continuation of 301 with emphasis on mastery of the grammar; commencement of reading in the New Testament itself. *Prerequisite Religion 301.* Spring semester.

310 Archaeology and the Bible

3 credits. (Core) The significance of recent discoveries in Biblical archaeology in Israel, with further consideration of discoveries in Mesopotamia, Egypt, and Syria. Generally, field work in Lancaster County excavations will be a part of the course. *Prerequisite Religion 201.* Spring, alternate years.

320 Biblical Theology

3 credits. (Core) A study of the nature and meaning of the redemptive acts of God in the history of the Hebrews and early Christians. *Prerequisite Religion 201, 202.* Spring, alternate years.

330 Anabaptist and Pietistic Movements

3 credits. (Core) A study of the historical and theological backgrounds of the Anabaptist and Pietistic movements as they relate to the Church of the Brethren and other denominations within the context of "The Believer's Church." Spring, alternate years.

340 History of Christian Thought

3 credits. (Core) A survey of representative thinkers in the history of the Christian Church and an examination of the central doctrines of the Christian faith. Religion 125 recommended. Fall, alternate years.

370-379 Special Topics in Religion

3 credits. (Core) An intensive study of a selected area within the sphere of religious faith. This course rotates among the departmental staff and includes topics such as the following: liberation theology, religion in America, evangelical theology, civil religion in America, Hebrew, the Buddhist tradition, esoteric religions.

480-489 Independent Study

Variable credit. Upon the student's initiative a project of study and research may be undertaken with the supervision of a faculty member in the Department. The senior research project, required of all majors, will normally be registered as a six-hour independent study during the student's senior year. For double majors the requirement is a three-hour independent study.

PHILOSOPHY**105 Contemporary Philosophical Issues**

3 credits. (Core) Concerns itself with issues such as human freedom, the search for the self, and meaning in human life. These issues are introduced by means of selected literary and philosophical texts.

115 Contemporary Ethical Issues

3 credits. (Core) An examination of current issues with attention to the way in which moral norms function within the individual and the society. Emphasis upon heightened self-awareness and the perspective of social ethics.

201 Ancient and Medieval Philosophy

3 credits. (Core) A comparative study of the Platonic and Aristotelian views of life, treating them as metaphors of life rather than as speculations about the nature of life. Fall semester.

212 Aesthetics

3 credits. (Core) An inquiry into the nature of creativity in the areas of art and science, beginning from the assumption that by comparing and contrasting creativity in these two areas the student comes to a greater understanding of artistic creativity. Spring semester.

255 Advanced Ethics

3 credits. (Core) A constantly changing inquiry into the values, norms, and thought forms used in the areas of bio-ethics, environmental ethics, business ethics, and the ethics of conflict and social change.

310 Contemporary Philosophy

3 credits. (Core) Study of selected primary sources in existentialism and phenomenology in order to understand some of the more important philosophical assumptions of contemporary culture. Fall semester.

320 Philosophy of Religion

3 credits. (Core) A study of man's rational efforts to establish the validity of the religious perspective with particular emphasis on theism, the proofs for the existence of God, and the nature of evil. Spring semester.

340 Modern Philosophy

3 credits. (Core) Reading and discussion of primary sources from the writings of Descartes, Spinoza, Leibnitz, and Kant. Offered on demand.

370-379 Special Topics in Philosophy

3 credits. (Core) A constantly changing specialized study within the field of philosophy or ethics featuring such areas as existentialism, philosophy of language, communal lifestyles, philosophy East and West.

480-489 Independent Study

Variable credit.

DEPARTMENT OF SOCIOLOGY-ANTHROPOLOGY- SOCIAL WORK

Associate Professors Eisenbise, Kraybill
(*Chairman*), Lehr, Raffield (*Director of Social
Work Program*)

Assistant Professor Iacono-Harris

Bachelor of Arts; Bachelor of Science

The programs in this department provide for the study of interpersonal and intergroup relationships, and the growth, changes, structures, and processes of human society. The courses reflect the philosophical tradition of service of Elizabethtown College and meet the challenges which arise from the struggles of increasing urbanization.

Students majoring in sociology, social work, and anthropology go to graduate school seeking higher degrees in public health, hospital administration, urban and regional planning, social work, law, sociology or anthropology. Some move directly into careers in personnel work, social research, both adult and juvenile probation, private and governmental social welfare agencies, and in other fields where knowledge of the interrelationships of society is important.

The Department offers three basic programs leading to either a bachelor of science or a bachelor of arts degree. These degrees differ only in the Core requirements of the College. The *program in sociology* emphasizes theoretical and quantitative approaches so that the student can easily move into graduate programs or into career opportunities. The *program in sociology-anthropology* stresses basic anthropological principles and an acquaintance with the diversity of world cultures. The *program in social work* recognizes both the rural and urban environment of the Elizabethtown College community and seeks to prepare students for professional social work practice in either setting. Courses and field experiences emphasize the distinctiveness and the similarity of various social service delivery systems. The program is accredited by the Council on Social Work Education.

The Department also participates in the secondary education certification in social studies offering sociology/anthropology concentrations. Interested students should consult the detailed descriptions in the interdisciplinary section of this catalog, page 93.

The sociology program requires Sociology 101, 201, 330, 331, and 332; Mathematics 151; Communication Arts 151 (or passage of competency test). In addition, the student must elect five sociology-anthropology courses for a total of 30 hours.

The sociology-anthropology program requires five courses in sociology: Sociology 101, 201, 330, 331, and 332. In addition, the student must elect five anthropology courses.

The social work program requires the following courses: Sociology 101; Psychology 105, 225; Political Science 118; Economics 101; Mathematics 151; Communication Arts 105 (or passage of competency test); Social Work 222, 233, 240, 325, 327, 329, 330, 345, 346, 470, 471, 498; plus 12 credits selected from among social work, sociology, anthropology, psychology, political science, and economics, directed toward the student's professional goal and approved by the social work adviser.

SOCIOLOGY**101 Introduction to Sociology**

3 credits. (Core) Basic concepts and theories relating to the study of society with emphasis on fundamental sociological methods and approaches.

201 Principles of Sociology

3 credits. (Core) Introduction to the methods of social research and theory. Topics include the history of the discipline, the meaning and use of key concepts, and varied approaches to the study of sociology. *Prerequisite Sociology 101.* Fall semester.

212 Population

3 credits. (Core) Population, its size, growth, trends, composition; the relation of population units in their various aspects to economic, social, political, and other major forces, trends, and institutions.

215 Criminology

3 credits. (Core) Sociological approaches to the study of crime, with emphasis on current sociological theory and research; special consideration of the judicial system and penology.

220 Race and Ethnic Relations

3 credits. (Core) Study of racial and other minorities in the United States, and their relationship with dominant groups. Includes study of discrimination, prejudice, racial myths, and methods of reducing intergroup tensions.

233 Human Behavior in the Social Environment
(Social Work 233)

3 credits. (Core) A study of the interrelationships of social systems, with particular emphasis upon the impact of the environment on human development. Special consideration of the influence of ethnicity, racism, sexism, and ageism upon behavior and the implications for human service delivery. *Prerequisite Psychology 105, Sociology 101.* Fall Semester.

237 Group Dynamics

3 credits. (Core) A consideration of empirical research in group dynamics within the larger attempt to integrate a theoretical understanding of group dynamics with its experiential application to everyday life.

247 Urbanization in America

3 credits. (Core) Focusing on the city, the most complex form of American social life, the course includes an analysis of the causes and consequences of urbanization, socio-economic differentiation, migration patterns, creativity and brutality in the metropolis. The course investigates the current state of urban life in America as well as the causes of past and present urban events. Fall semester.

305 Marriage and the Family

3 credits. (Core) A brief comparative view of different family patterns; a functional approach to questions related to both premarital and postmarital aspects of married and family life in our American culture.

317 Sociology of Religion

3 credits. (Core) An analysis of the role and function of religion and religious institutions in society; a study of religion as a social and cultural system.

330 Methods of Social Research (Political Science 330, Social Work 330)

3 credits. (Core) Basic procedures of sociological research, including research design, sampling, measurement, and data analysis. *Corequisite or prerequisite Sociology 201; Mathematics 151.* Fall semester.

331 Social Statistics

3 credits. (Core) Application of the concepts of Mathematics 151, Probability and Statistics, to particular statistical procedures used in social research and analysis. *Prerequisite Mathematics 151, Sociology 330.* Spring semester.

332 Sociological Theory

3 credits. (Core) An examination of the nature of theory and an analysis of sociological theories from early times to the present day with special emphasis on the major paradigms of contemporary sociology. *Prerequisite Sociology 201, 330.* Spring, alternate years.

342 Modern Corrections

3 credits. (Core) An overview of the origins, processes, organization, and contemporary trends of corrections for juveniles and adults, including an examination of current issues and alternatives to correctional policies.

344 Gerontology

3 credits. (Core) The study of several interrelated problem areas of the aged: physiological, psychological, and social.

371-380 Special Topics in Sociology

3 credits. (Core) Readings and discussion of topical areas of sociology. Topics will include, but not be limited to, the following: complex organizations, women in society, evaluation research, the arms race.

471 Internship

Variable credit. Applied field instruction in a sub-field of the discipline chosen to meet the needs of the student. *Prerequisite permission of instructor.*

481-491 Independent Study in Sociology

Variable credit. (Core) Offers to advanced students the opportunity for independent study, making use of sociological approaches, in areas not included in the regular offerings within the Department. *Prerequisite permission of instructor.*

498-499 Research Seminar

Variable credit. Research in sociology under the close supervision of the instructor and with peer discussion and criticism. A completed research experience is required. *Prerequisite permission of instructor; prerequisite or corequisite Sociology 330, 331, 332.*

ANTHROPOLOGY**201 Physical Anthropology**

3 credits. (Core) An introductory course in the study of human beings as physical organisms, their place in nature, their biological development and differentiation, and their early cultural attainments. Fall semester.

202 Cultural Anthropology

3 credits. (Core) An introductory course in the study of culture, its nature and characteristic features, with special attention to language, kinship, and religious systems, including a survey of the theories of culture and the methods for studying it. Spring semester.

211 World Cultures

3 credits. (Core) A survey of some of the peoples and cultures of the world from early times to the present with emphasis on physical, cultural, linguistic, and demographic factors. Fall semester.

307 Peoples and Cultures of Africa

3 credits. (Core) Ethnographic and cultural analysis of the folk background and contemporary customs of the peoples of sub-Saharan Africa with special attention to the problems of culture change.

308 Peoples and Cultures of Latin America

3 credits. (Core) Ethnographic and cultural analysis of the folk background and contemporary customs of the peoples of Latin America with special attention to the problems of culture change.

360 Sociocultural Change

3 credits. (Core) Theoretical perspectives on sociocultural change and a consideration of the mechanisms, patterns, and strategies of change.

371-380 Special Topics in Anthropology

3 credits. (Core) Readings and discussion of topics in anthropology chosen in accord with the needs and interests of the participants. Past topics have included Indians of North America, archaeology of Mexico, ethnography of Mexico, and primitive religion.

481 Independent Study in Anthropology

Variable credit. (Core) Designed to give the advanced student in anthropology the opportunity to pursue specialized topics not regularly offered.

SOCIAL WORK**222 An Introduction to Social Welfare and Social Work**

3 credits. The historical, philosophical, and sociological perspectives of social welfare and social work and their embodiment in specific social service agencies, including an assessment of the impact of discrimination. Field trips to social service agencies. *Prerequisite Sociology 101, Psychology 105.* Spring semester.

233 Human Behavior in the Social Environment (Sociology 233)

3 credits. (Core) A study of the interrelationships of social systems, with particular emphasis upon the impact of the environment on human development. Special consideration of the influence of ethnicity, racism, sexism, and ageism upon behavior and the implications for human service delivery. *Prerequisite Sociology 101, Psychology 105.* Fall Semester.

240 Basic Helping Processes

3 credits. Skills of providing effective human service, with emphasis on an understanding of human behavior and needs, the role of the helper, and various approaches to problem solving. Laboratory training. Fall semester.

325 Rural Social Welfare Systems

3 credits. The development and organization of the rural community and its network of services intended to relieve community, family, and individual problems. Topics include the relation of policy to social goals in various programs, the values of the social work profession, and the impact of institutional discrimination. *Prerequisite Social Work 222.* Spring semester.

327 Urban Social Welfare Systems

3 credits. On-site study of a large urban area with emphasis on urban social problems and social service systems and on comparisons between urban and small town-rural areas. *Prerequisite Social Work 325.* Mini-term.

329 State and National Social Welfare Systems

3 credits. Study of state and national social welfare policies and systems with emphasis on the relation of social problems, such as poverty, insecurity, and unequal opportunity, to social, economic, and political systems. *Prerequisite Social Work 327, Political Science 118, Economics 101.* Fall semester.

330 Methods of Social Work Research

3 credits. Fundamental instruction in understanding current research in social work and in applying this knowledge through the course project. *Prerequisite or corequisite Mathematics 151.* Fall semester.

345 Generalist Social Work Practice

3 credits. Functions of the generalist social worker explored in light of theories of social systems, problem-solving, and helping processes. The impact on social change of variously-sized client systems, racism, social class, ethnic consciousness, sexism, and ageism. "Volunteer service" required. *Prerequisite Social Work 240.* Fall semester.

346 Variant Approaches to Social Work Practice

3 credits. Builds upon the generalist approach by studying various approaches such as crisis intervention, reality therapy, behavior modification, case work, group work, neighborhood development, and others. Application of content through concurrent field instruction. *Prerequisite Social Work 345; corequisite Social Work 470.* Fall semester.

371-380 Special Topics in Social Work

3 credits. Reading and discussion of topical areas of social work. Topics will include, but not be limited to: complex organizations, women in society, evaluation research, ageing: needs and services, human sexuality, child welfare, family treatment, services to minority groups.

470 Introductory Field Instruction

3 credits. Supervised field instruction for at least 200 hours in an agency. Student begins to assume responsibility with client systems in such ways as monitoring tasks, providing support, conducting group activities, and assisting the social worker with other professional responsibilities. *Corequisite Social Work 346.* Fall semester.

471 Advanced Field Instruction

14 credits. Supervised field instruction for at least 392 hours plus a weekly on-campus seminar. Students proceed from an "assistant" position to one of complete client responsibility under direct supervision. Roles students assume may include advocate, enabler, social broker, and program planner. *Prerequisite permission of instructor; corequisite Social Work 498.* Spring semester.

480-489 Independent Study in Social Work

Variable credit. Opportunity for advanced students independently to pursue study otherwise not available in the curriculum. *Prerequisite permission of instructor.*

498 Senior Seminar

3 credits. Final course integrating the theory from preceding courses with the professional experience of field instruction. A major project required. *Prerequisite Social Work 470; corequisite Social Work 471.* Spring semester.

SPANISH

See Department of Modern Languages, page 70.

THEATRE

See Department of Communication Arts, page 56.

Interdisciplinary Programs

FORESTRY AND ENVIRONMENTAL MANAGEMENT

Bachelor of Science

The College offers a cooperative program with Duke University which leads to a bachelor of science degree from Elizabethtown and a Master of Forestry or Master of Environmental Management from Duke. The student who undertakes this major gains a wide exposure to the liberal arts through fulfilling the College's General Education Core in addition to courses in the student's major, and gains professional training at Duke in such areas as forest resource production, resource science, resource policy and economics, or other individually tailored programs.

In this program the student spends three years at Elizabethtown College, fulfilling the General Education Core requirements, and two years at Duke's School of Forestry and Environmental Studies. In the first year at Duke the student completes the undergraduate degree requirements and is awarded the bachelor of science degree from Elizabethtown. After an additional year, Duke awards the degree of Mastery of Forestry or Master of Environmental Management.

In order to prepare students for the professional program at Duke, the College offers a pre-forestry and environmental management program with major and minor concentrations in biology, business, and political science; this program is detailed below. However, any undergraduate major can be considered for admission to Duke; such students should take at least one year of biology, mathematics, and economics. Students interested in this field should be aware that although neither the program at Elizabethtown College nor the undergraduate program at Duke University is accredited by the Society of American Foresters, the graduate program at Duke does meet the accreditation requirements.

Admission to Duke is by application, and is based on an evaluation of a student's undergraduate record, Graduate Record Examination scores, letters of recommendation, and interviews.

There are variations of the schedule herein described. For further details contact Mr. Laughlin.

Majors shall complete all General Education Core requirements for the bachelor of science degree. Within the Core areas the following courses should be taken:

Mathematics Core (six hours): Mathematics 117, 172 or 151; 101, 121; or 151, 121. If 151 is not taken for Core, it is strongly recommended as an elective.

Science Core (eight hours): Majors with a concentration in biology should take chemistry; majors with concentrations in business or political science should take biology.

Social Science Core (nine hours): three of the nine hours must be in psychology or sociology/anthropology.

Each student will complete a major concentration in either biology, business, or political science, and two minor concentrations totaling 18 hours in the other two areas, with at least six hours in each area.

Biology: Major concentration recommendations are Biology 111, 112, 313-313L, 321, and two courses from Biology 331, 332, 347, 235, or 215-215L. Minor concentration recommendations are Biology 111, 112, 331; if only six hours are elected, they should be Biology 111, 112.

Business: Major concentration recommendations are Accounting 107, Computer Science 125, Economics 101, Business Administration 265, and either of the following two options: Accounting 108 and Economics 102, or Business Administration 331, 332. Minor concentration recommendations are any combination of Accounting 107, Economics 101, Computer Science 125, Business Administration 265. Economics 101 is, however, strongly suggested.

Political Science: Major concentration recommendations are Political 117, 118, 303, 308, 471. Minor concentration recommendations are Political Science 308, 471; if only six hours are elected, they should be Political Science 471.

GENERAL SCIENCE CERTIFICATION

Bachelor of Science

Elizabethtown College offers a secondary education certification program in general science which is designed to lead to a general science teaching certificate in secondary education with a major concentration in biology, chemistry, or physics. The program aims to develop a comprehensive background for teachers in order that they may be better qualified to teach science in the general science curricula of junior high and middle school programs. The requirements of each concentration include a broad exposure to the other sciences and to mathematics, as well as to the instruction and experience in teaching provided by the professional education sequence.

The specific requirements for each of the concentrations follow:

Biology: a minimum of 24 hours in biology which must include Biology 111, 112, 215 and 215L, 313 and 313L; one course selected from Biology 212, 331, 235, 332, 347, 341; one course selected from Biology 324–524, 321, 322–522; Chemistry 101, 102; Physics 203, 204; two courses from Earth Science 111, 107, 108; Mathematics 101–121, or 117–172, or 117–151; Psychology 105; Education 305, 225d, 310, 415, 225e, 473.

Chemistry: a minimum of 24 hours in chemistry which must include Chemistry 101, 102, 201, 202; and eight hours from among Chemistry 305, 315, 333, 341, 343, 344, 351, 352; Biology 111, 112; 2 courses from Earth Science 111, 107, 108; Physics 132, 231; Mathematics 101, 121, 122; Psychology 105; Education 305, 225d, 310, 415, 225e, 473.

Physics: a minimum of 24 hours in physics which must include Physics 132, 231, 232, 343, 404; five or more additional credits in physics and drawing; Biology 105, 106, or 108; Chemistry 101, 102; two courses from Earth Science 111, 107, 108; Mathematics 101, 121, 122; Psychology 105; Education 305, 225d, 310, 415, 225e, 473.

SOCIAL STUDIES CERTIFICATION

Bachelor of Science

The social studies certification program involves the student in two general areas of study. First, the student acquires a mastery of the various subject fields that are a part of social studies teaching. Secondly, the program requires training in the techniques of teaching, along with actual teaching experience in a social studies classroom. Upon successful completion of the requirements in these two areas, students are certified to teach social studies in secondary schools in Pennsylvania and, by reciprocal arrangements, in several other states.

The academic segment of the student's preparation calls for specified courses in economics, geography, history, political science, and sociology/anthropology. This background enables the student to prepare for teaching in all areas classified as the social studies in secondary schools. The student concentrates in depth in one of the areas. This concentration encourages thoroughness in understanding one area and also lays the groundwork for future graduate study in that subject.

Professional training in the skill of teaching is acquired through a college course on methods. In this course the student explores both the theory and the practical strategies of teaching. Finally, the student spends a semester actually teaching social studies in a secondary school classroom under the careful supervision of a competent secondary school teacher and a college professional who offer criticism, advice, and encouragement.

Detailed requirements for the social studies major follow:

Students must take one 24-hour major, two nine-hour minors, and one six-hour minor. All students must take Geography 105, 205, and the professional education sequence: Psychology 105; Education 305, 225d, 225e, 415, and 473.

Economics: The 24-hour major must include Economics 101, 102, and 18 elective hours in economics. The nine-hour minor comprises Economics 101, 102, and three elective hours in economics. The six-hour minor comprises Economics 101, 102.

History: The 24-hour major must include History 105, 201, 202, 390, one European history beyond 105; one non-United States, non-European history; and six elective hours in history. The nine-hour minor comprises History 105, 201, 202. The six-hour minor comprises History 105, 202.

Political Science: The 24-hour major must include Political Science 117, 118, 202, 205, 301, either 303 or 308, 398, and a three-hour elective in political science. The nine-hour minor comprises Political Science 117, 118, 205. The six-hour minor comprises Political Science 117, 118.

Sociology/Anthropology: The 24-hour major must include Sociology 101, 201, Anthropology 102, and 15 hours planned in consultation with, and approved by the social studies advisers in the Departments of Sociology and Education. The nine-hour minor comprises Sociology 101, 201, and Anthropology 202. The six-hour minor comprises Sociology 101, Anthropology 102.

Education 305 Practicum in Secondary Education: Social Studies

4 credits. Experience with and demonstration of various styles and strategies in the teaching of social studies in the secondary school classroom; in-school observation and internship, or paraprofessional experience are a part of the course.

Prerequisite Psychology 105; corequisite Education 225d.

AMERICAN STUDIES CONCENTRATION

The American studies concentration provides the student with an interdisciplinary understanding of American life and culture through a careful selection of courses largely within the College's General Education Core. Rather than selecting courses unsystematically, the student will choose courses which deal with American social or political history, literature, fine arts, religion, and so forth. During the last two years the student will take an interdisciplinary "capstone" seminar in American Studies. Thus, by taking six courses in Core and one free elective, the student will complete a 21-hour concentration which will be indicated on the final transcript. The program of study is expected to provide the student with a multifaceted understanding of his own country and culture.

When, for example, the student must choose an advanced course in history, instead of choosing unsystematically, he will select an advanced course in American History (History 201, for instance, History of the United States). Likewise, when he must choose the advanced course in literature to fulfill the Core, he will select a course in American literature (English 341, for instance, Rise of Realism in American Literature). Every semester before pre-registration the American Studies Committee will compile and distribute to all students pursuing the concentration a list of those Core courses which count in the American Studies Concentration.

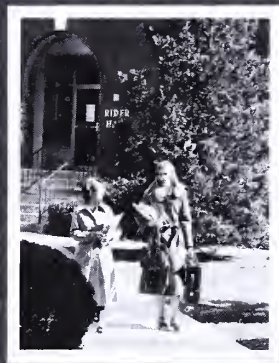
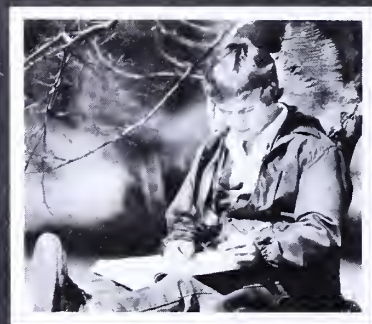
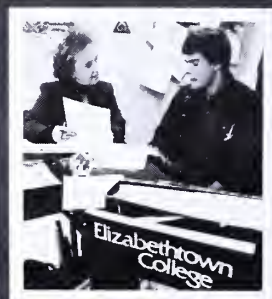
In his junior or senior year, the student will take the Seminar in American Studies (which counts as a free elective) to complete the requirements of the concentration. The Chairman of the American Studies Committee will then see to it that the student's transcript indicates "American Studies Concentration."

The concentration is especially valuable for business majors, forestry majors, and for those going into law, public service, and education. Everyone, however, regardless of his major, is likely to benefit from the concentration and is free to pursue it.

498 Seminar in American Studies

3 credits. An exploration of a particular issue or time in American life from an interdisciplinary point of view. *Prerequisite completion of 18 hours in the American Studies concentration or permission of instructor.*

Academic Regulations



Academic Regulations

REGISTRATION

Students are required to register for classes on those days designated on the college calendar. Students registering later than the days specified will be charged a late registration fee. A student may register either as a regular or a non-degree student, and as full-time or part-time. Regular students only are degree candidates, and they must be in an approved program.

A student registers for courses—not for a time or professor. There is no guarantee that a student will get every course at the time requested.

Students pre-register for the fall semester at the beginning of April. To pre-register, students must have met all financial obligations, including the payment of the pre-registration deposit for the next semester.

Pre-registration for the spring semester usually takes place during the first week of December. Master schedules and course request cards are furnished to the student approximately four weeks prior to this date, so there is ample time to make an appointment with the adviser.

Evening/Saturday students should check with the Office of Continuing Education for details about registration.

CHANGE OF REGISTRATION

Courses may be added within the first week of a semester and may be dropped without academic penalty during the first four weeks. Withdrawal from a class must be approved by the academic adviser and completed through the Registrar's Office.

THE STUDENT'S PROGRAM

Each student is responsible for knowing the applicable catalog materials; with this knowledge, and in consultation with their academic advisers, students should carefully prepare their programs.

After a freshman is admitted into the College, the work of the first two years is largely intended to fulfill the requirements of the General Education Core, which provides a broad education and enables the student to select a major wisely.

In the junior and senior years most curricula afford time for a wide range of electives in addition to the prescribed courses outlined for each year. Many courses have prerequisites, and students are reminded of their responsibility for taking courses in sequence. To change from one curriculum to another, the student must consult with a member of the counseling staff.

Since the completion of 128 semester hours of work is required for a degree, a student who plans to graduate in four years must include an average of 16 semester hours for each of eight semesters. However, many students wisely elect to take a lighter academic load in order to do better work, and choose to attend a summer session or a part of a fifth year.

A student with average grades may carry up to 18 semester hours of work in any given semester except the summer session, when the maximum is 14 semester hours for the 10-week period. A student who has achieved a cumulative grade point of 3.00 or above may carry up to 20 semester hours credit in a semester, or 16 semester hours credit in a summer session. For each semester hour above 18 for which a student is enrolled in a given semester, an additional fee is charged, and approval by the Dean of the Faculty is required. Students who wish to petition for an overload should obtain a form in the Registrar's office.

Any student taking 12 or more credit hours per semester at Elizabethtown College is considered a full-time student and will pay full tuition and fees. Any student taking 11 or fewer hours per semester will pay the regular semester hour rate plus applicable fees, and will receive a library card and full use of the library facilities. In a summer session students holding a Pennsylvania Higher Education Assistance Agency (PHEAA) grant are considered full-time if they carry a minimum of 12 semester hours divided among any three terms. Tuition and fees are paid according to the schedule in the summer session brochure. For further details concerning summer school consult the summer school brochure available from the Registrar's office.

The student's class standing is determined on the basis of the number of credits earned. After earning 30 credits, a student is considered a sophomore; with 60 credits a junior; with 90 credits, a senior.

CLASS ATTENDANCE

Class attendance is handled individually by the faculty members. It is the position of the College that the above average student should be given some freedom of judgment as to his attendance needs, while the below average student must, of necessity, be encouraged or required to maintain a record of regular attendance.

Each faculty member will announce his attendance policy at the start of each semester. A professor may dismiss a student from a course for excessive absences. A student may appeal for reinstatement to the Academic Standing Committee.

A student should take care of absences due to ill health or other personal problems through directly consulting the professor.

CREDITS, GRADES, AND QUALITY POINTS

Credit is indicated in terms of the semester hour. Each semester hour unit signifies work completed in one 50-minute recitation, or two or more 50-minute lab periods per week for a semester of 15 to 18 weeks, or an equivalent learning experience.

Grades are reported for work as follows: A, excellent; B, good; C, satisfactory; D, poor; F, failing; W, withdrawal from class; I, work incomplete. A grade of I may be obtained by making a formal request to the professor of the course in question. The student and the professor must sign a written agreement which specifies the nature and the quantity of the work to be completed and the projected date of completion. All grades of I received in the fall semester must be removed by April 1. Those received in the spring semester or summer session must be removed by October 1. Failure to do so results in a grade of F. A system of grade appeals may be found in the student handbook.

Quality points are given for credit as follows: for a grade of A, 4 per semester hour; B, 3 per semester hour; C, 2 per semester hour; D, 1 per semester hour; F, P, NP, and WF, no quality points. Credits earned off-campus in pro-

grams under the jurisdiction of the College, or approved by it, or both, while the student is matriculated at the College, are considered on-campus credits. The student's rank in class at graduation is based on the credits, grades, and quality points earned at Elizabethtown College.

REPEATING COURSES

Courses which may be repeated (see below) must be taken at Elizabethtown College; the most recent grade is final and is used in the calculation of semester and cumulative averages. When repeating a course a student must file the appropriate repeat registration card in the Registrar's Office. Courses which may be repeated follow:

1. A student may repeat any course in which he has received an F.
2. Ordinarily a student may not repeat a course in which he has earned a grade of D. However, upon the request of the student's adviser and the approval of the department chairman, a student may repeat a course in his major department, or a course required by the major.

PASS/NO PASS GRADING

Students may elect to take their required physical education courses on a pass/no pass basis. In addition, students may select one other course per semester to be graded in this manner under the following conditions:

1. A student who is in a bachelor's degree program must currently be of junior or senior standing (60 or more credits); a student who is in an associate degree program must currently be of sophomore standing (30 or more credits).
2. The cumulative average must be 2.75 or better.
3. The selected course may carry no more than four semester hours of credit and must be a free elective. It must be outside the major department, may not satisfy a Core requirement, and may not be a course required by the major.
4. No more than four courses in total (excluding physical education) in the baccalaureate program, nor more than two courses in total (excluding physical education) in the associate degree program may be taken under this grading option.

INDIVIDUAL PROGRAM ADJUSTMENTS

Academic departments reserve the right to counsel any student out of a program or major for academically related reasons. A student has the right to appeal such departmental action to the Dean of the Faculty, who will direct warranted appeals to the Academic Standing Committee.

ACADEMIC PROBATION

Academic probation means that a student is in danger of being dismissed from the College for academic reasons. Students who fall into the following categories are placed on academic probation:

<i>Semester hours in the College:</i>	<i>with</i>	<i>Cumulative Grade Point below:</i>
1-18		1.50
19-36		1.80
37-54		1.90
55-72		1.95
73 or more		2.00

It is recommended that students on academic probation limit their load to four courses or 13 semester hours, whichever is less, in any semester in which the probation exists. The summer maximum should be two courses per term.

ACADEMIC DISMISSAL

The College, upon recommendation from the Academic Standing Committee, may at any time dismiss from the College a student who is on academic probation. Students should be aware that all cases are handled individually by the College, and that very poor academic performance may result in dismissal at the end of any semester.

A student who is in academic difficulty or on academic probation may be requested by the Academic Standing Committee, in consultation with the student and advisers, to enroll in a special or particular program and to become involved in testing, counseling, or other developmental activities. Satisfactory performance by the student in such assignments may be interpreted by the Academic Standing Committee as satisfactory progress, and may make it unnecessary for the Committee to dismiss a student.

READMISSION OF STUDENTS NOT IN GOOD ACADEMIC STANDING

A student who left the College while in academic difficulty (below 2.0 cumulative GPA) must petition the Academic Standing Committee, through the Office of the Dean of the Faculty, for readmission.

A student who has been readmitted to the College after an absence from the College of *five successive years* may, upon fulfilling certain requirements, have previous grades of "F" removed from the cumulative grade point average. For full information the student should consult with the College Registrar.

VOLUNTARY WITHDRAWAL FROM COLLEGE AND CLASSES

Full-time students withdraw from the College through the Center for Counseling and Student Development; part-time students withdraw through the Registrar's Office. For purposes of billing, room reservation, and academic responsibility, the effective date of withdrawal will be the date on which the completed official notice is returned to the Center for Counseling and Student Development or the Registrar's Office. A student who withdraws without notification will receive no refund and may incur the full room penalty. Failure to comply with withdrawal procedures may result in loss of the privilege of re-admission to the College and the right to the release of a transcript of credits earned.

Students withdraw from classes through the Registrar's Office. The appropriate form must be signed by the student's adviser and the professor for the course. The course will not appear on the permanent record if the student withdraws on or before the end of the fourth week of the semester. From this time to the end of the eleventh week, a withdrawal will result either in a grade of W or W/F. All withdrawals after the end of the eleventh week of the semester receive grades of W/F unless the withdrawal is for medical reasons, in which case a W will be recorded. A grade of W/F is calculated into the student average as though it were an F.

LEAVE OF ABSENCE

A student may take a leave of absence from the College to attend one of a number of cooperative educational programs. These programs include the BCA program, attendance at the University of Ghana, a semester or a year at the Merrill-Palmer Institute, and so forth.

To arrange a leave, a student should contact the faculty coordinator or director of the appropriate program. Application must be made no later than the pre-registration period of the semester prior to the one in which the leave begins. Any administration fees for off-campus programs are payable at the time a student applies for the leave. A leave is approved upon the student's acceptance into the program.

Pre-registration information will be sent to students on leave approximately by March 15. The pre-registration card and a \$100 deposit must be returned to the Registrar's Office by May 1 to ensure a place in the College and in the courses selected.

COLLEGE SCHOLARS

Students who, having taken at least 60 credits at Elizabethtown College, have maintained a 3.75 cumulative quality point average, will be recognized as College Scholars for the succeeding academic year. They will be awarded a special certificate and their status as College Scholars will be recorded on their permanent records. No graduating seniors will be named College Scholars since a 3.75 average makes them eligible for *cum laude* or higher honors at the commencement exercises.

DEAN'S LIST

A student who earns a quality point-credit ratio of 3.50 or better is regarded by the College as having performed with distinction, and that student is placed on the Dean's List of Honor Students for the semester.

SCHOLAR'S PRIVILEGE

Any full-time student who appeared on the Dean's Honor List during the preceding semester may, with the permission of the instructor, attend any class in the College on a space available basis as a scholar's privilege without registration or credit.

DEPARTMENTAL STUDENT PRIVILEGE

Any full-time or part-time junior or senior student may, with the permission of the instructor, attend any class within his major department on a space available basis.

AUDITING COURSES

Students in good academic standing (2.0 or better) may elect to audit courses provided: (1) they do not pre-empt regularly enrolled students; (2) they have the permission of the professor teaching the course. Audit hours are included in the total hours to determine full-time status and overload charges. A fee is charged on a per credit-hour basis for part-time students who wish to audit courses. Auditors, both full-time and part-time, must also pay any additional fees for labs, studio supplies, and so forth.

Students may add a course for audit or change a course registration from audit to credit during the first week of class only. Change of course registration from credit to audit cannot be made after completion of the fourth week of the semester. Once a course has been audited, it may not be taken for credit. Likewise, a course that has been completed for credit may not be repeated and recorded as an audit course.

The requirements for the audit will be determined by the professor. Upon completion of all such requirements, the audit will be posted on the student's permanent record card. Audit courses carry neither academic credit or grade.

ADVANCED PLACEMENT

Challenge Testing is a comprehensive term meant to encompass all proficiency tests and tests for credit prepared for the traditionally admitted, regularly enrolled student and administered by Elizabethtown College faculty and staff. There are two types of challenge tests: Tests for Academic Credit and Tests for Placement and/or Waiver. *Tests for Academic Credit* are of two kinds: Proficiency tests such as the PE swimming proficiency test; and Challenge Exams in which a traditionally admitted, regularly enrolled Elizabethtown College student requests to be examined for credit in a particular course from the college catalog.

(Practicums, internships and research courses would continue to be excluded from this option.) *Tests for Placement and/or Waiver* comprise tests such as those given for placement in English, modern languages, mathematics, or typing. No credit is awarded for placement testing.

All challenge testing will be graded on a pass/no pass basis. A grade of "Pass" indicates that the credit and/or the advanced placement is to be awarded.

Fees for Tests for Academic Credit are \$50. Because the fee is charged for the test and not for the credit per se, it will be charged without regard to the test results. A flat fee of \$25 will be charged for Tests for Placement and/or Waiver. Challenge Tests given at the initiative of the College will be administered without fee to the student. The mathematics and modern language placement tests given at the beginning of each semester, and the PE swimming proficiency test are examples of such testing situations.

TRANSFER OF CREDITS

Students wishing to transfer credits to Elizabethtown College should obtain a permission form in advance from the Registrar's Office. The College will normally transfer credit (but not grades or quality points) for course work taken at another regionally accredited institution for which a grade of C or better was obtained.

Students who have achieved junior status (60 credits) either through work at Elizabethtown College or through a combination of work at the College and another institution are not permitted to transfer additional credits from a two-year institution to the College. Such students may transfer credits from four-year institutions, but only upon the prior approval of the Registrar. Students must request the Registrar's Office of the transferring institution to send an official transcript to the Registrar's Office at Elizabethtown College.

Students desiring to transfer credits from Elizabethtown College to another institution must make the request in writing to the Registrar's Office, in person or by mail, at least one week prior to the date needed.

GRADUATION REQUIREMENTS

To receive a bachelor of arts or bachelor of science degree from Elizabethtown College, the student must earn 128 semester hours credit, or in the case of engineering, medical technology, and other special programs, the number indicated in the course outline, including all of the specific courses indicated, the General Education Core requirements, and the requirements for the major field.

To receive an associate of science degree with a major in medical secretarial science, the student must earn a minimum of 64 credits including 28 credits of General Education Core courses, six credits of free electives, and the specific courses required by the major.

In order to be eligible for graduation, students must have a quality point-credit ratio of at least 2.00 with a minimum average of 2.00 in the major. Students transferring from other colleges must have a ratio of at least 2.00 in courses pursued in residence at Elizabethtown College.

Graduation requirements will be governed by this catalog and the Program Guide Book issued by the Registrar dated four years prior to a student's graduation (two years in the case of associate degree students), or by the catalog in effect at the time of graduation if the student so chooses.

Transfer students are subject to the requirements of the catalog in effect when they begin studies at Elizabethtown College. Students coming from two-year institutions may choose to be governed by the catalog dated four years prior to their graduation if they can present evidence that they planned to transfer to Elizabethtown College when they matriculated at the two-year college.

To meet graduation requirements, the student must earn on-campus credits as follows: 1) a minimum of 15 credits in the major, at least eight of which are at the upper level (normally 300 and 400-level), and 2) at least 30 of the last 60 credits.

Elizabethtown College will graduate only those students who have met the moral and financial obligations incurred in pursuit of their studies. The completion of the required number of se-

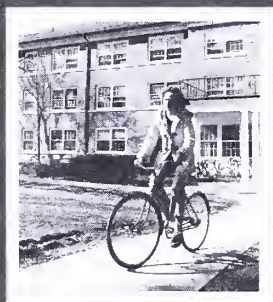
mester hours does not in itself constitute eligibility for graduation.

The Office of the President must be notified by anyone who plans to be graduated in absentia. It is the responsibility of the candidate for a degree in December, May, or August to make formal written application for the degree to the Registrar by September 15 or February 15.

At the time of his graduation, a student who has achieved a cumulative quality point-credit ratio of 3.50 will be graduated cum laude; a ratio of 3.75, magna cum laude; a ratio of 3.90, summa cum laude.

Transfer students will receive honors if they have earned a minimum of 60 semester hours credit at Elizabethtown College, if they are recommended for honors by the major department, and if their averages meet the above requirements.

Campus Life



Campus Life

CO-CURRICULAR EXPERIENCES

Because the education of students takes place in a variety of ways, their cocurricular life is a vital and integral part of the college experience. Through participation in the many clubs and organizations approved and sponsored by the Student Senate, in academic departments, the performing arts, and intercollegiate and intramural athletics, students have the opportunity to express individual interests, to grow in their understanding of the various academic disciplines, to develop leadership skills, and to enrich their liberal education.

Honorary Organizations

- Alpha Lambda Delta
- Alpha Kappa Delta
- Alpha Psi Omega
- Delta Sigma Rho—Tau Kappa Alpha
- Delphi Society
- Phi Alpha Theta
- Pi Sigma Alpha

Clubs and Organizations

- Black Student Union
- Brethren Identity
- Commuter Council
- Campus Gold
- Elizabethtown Christian Fellowship
- Eta Phi Sigma
- International Club
- Newman Club
- Outdoor Club
- Ski Club

Departmental Clubs

- Accounting
- Alpha Mu
- American Chemical Society
- Biology
- Geology
- History
- Management
- Marketing
- Mathematics
- Medical Technology
- Music Educators
- Occupational Therapy
- Political Science
- Pre-med
- Psi Chi
- Psychology
- Religion/Philosophy
- Society of Physics Students
- Sociology
- Social Work
- Student Data Processing
- Student Pennsylvania State Education Association
- Supreme Fiction

Performing Arts

- Choral Union
- College Chorale
- College Community Orchestra
- Concert Band
- Concert Choir
- Jazz Band
- Repertory Theatre
- Sock and Buskin
- String Ensemble
- Pep Band

Athletics

- Blue Jay
- Synchronized Swim Club

Detailed information may be found in the student handbook.

Lectures and Concerts

The College presents annually a varied program of music, dance, drama, films, and lectures, featuring distinguished artists and speakers. Student organizations in the performing arts, individual student recitals, and speakers in various academic clubs not only provide further entertainment and instruction, but also permit participation of interested students.

Student Government

The Student Senate is the student arm of the College's campus government. Students are elected each spring on a representative basis from residence halls, academic departments, and off-campus residences. Student senators are responsible for assuring a student voice in the Community Congress, the College's governance structure, and for allocating funds for student activities, clubs, and organizations.

Activities Planning Board

The Activities Planning Board is composed of students who work with the Director of Student Activities to plan weekend and general campus social activities for the college community.

STUDENT PUBLICATIONS AND COMMUNICATIONS

Opportunity for self-expression is provided through the various student publications and radio communications:

The Etownian is a weekly newspaper published by students and available to all members of the college community.

The Conestogan is the college yearbook published annually and available each fall.

WVEC, the college radio station, managed by the Communication Arts Department, broadcasts daily under the operation of a student staff. News of general campus interest, special features, and various types of music are carried at 640 on the AM band.

The Rudder, the student handbook and its supplement, is published by the Office of Student Affairs with the assistance of interested students. *The Rudder* serves as a guide and reference providing up-to-date and essential information about student life and services as well as many of the policies, rules, and regulations governing student life.

ATHLETICS

Elizabethtown College provides a varied intercollegiate and intramural sports program. It adheres to the principles and policies of the various athletic conferences of which it is a member.

Conference Membership

Men: National Collegiate Athletic Association (NCAA)

Eastern Collegiate Athletic Conference (ECAC)

Middle Atlantic Conference (MAC)

Women: National Collegiate Athletic Association (NCAA)

Association of Intercollegiate Athletics for Women (AIAW)

Eastern Association of Intercollegiate Athletics for Women (EAIAW)

Middle Atlantic Conference (MAC)

Facilities

The Alumni Physical Education Center houses offices, classrooms, and the Thompson Gymnasium. With seating capacity for sporting events for 2400 spectators, the configuration of the gym may be modified to provide three basketball courts, eight badminton courts, four volleyball courts. There are also three racquetball/handball courts, and a remedial gym.

Other facilities include the swimming pool and bowling lanes in the Baugher Student Center.

Outdoor facilities include two soccer fields, a field hockey field, a baseball field with dugouts, eight all-weather tennis courts, and an intramural field.

Intercollegiate Program

The sports program attracts many skilled athletes on an intercollegiate level. Intercollegiate sports for men include:

Soccer (varsity and J.V.)

Basketball (varsity)

Wrestling (varsity)

Swimming (varsity)

Baseball (varsity)

Track and Field (varsity)

Tennis (varsity)

Intercollegiate sports for women include:

Field Hockey (varsity and J.V.)

Volleyball (varsity and J.V.)

Basketball (varsity and J.V.)

Swimming (varsity)

Tennis (varsity)

Softball (varsity)

Track (varsity)

Intramural Program

Recognizing the importance of sports participation regardless of the level of a participant's skill, the College maintains a broad intramural athletic program for men and women, arranged and directed by the Director of Intramural Sports working with interested students. Intramural teams are selected from residence halls, faculty, alumni, and commuters. If there is sufficient interest several leagues are organized, according to ability levels.

Activities offered most regularly:

- Flag Football (men)
- Tennis (men, women)
- Bowling (coed)
- Volleyball (men, women, coed)
- Racquetball (men, women)

If there is sufficient interest other activities will be added. For example:

- Tennis (coed)
- Basketball (women, coed)
- Handball (men)
- Chess, (men, women)
- Softball (men, women, coed)
- Wrestling (men)
- Water Polo (men, women)
- Table Tennis (men, women)
- Badminton (men, women)
- Swimming (men, women)
- Lacrosse (men, women)

STUDENT SERVICES

Freshmen Orientation Programs

The orientation programs help students learn about the academic community and student life at Elizabethtown College. This education begins with the original mailings to accepted students and their meetings with college personnel, and continues throughout their initial experience on the campus.

Summer Orientation

All freshmen and their parents are invited to attend one of several orientation programs during the summer. During their stay on campus students and parents meet college administrators, faculty, and student leaders through a variety of seminars on college life. Students also meet individually with academic advisers to plan their fall schedule of classes.

Fall Orientation

Orientation continues in the fall when freshmen are required to arrive a few days before the upper classmen. During this orientation considerable attention is given to three areas: educational programs and requirements, college facilities, and social adjustment.

Student Center

The Baugher Student Center houses many student services and facilities. The first floor contains the Jay's Nest snack bar, campus theatre, college pool, post office, bookstore, bowling alleys, and informal lounge, as well as commuter students' lockers and student mail boxes.

The second floor houses offices for the Dean of Student Affairs, Center for Counseling and Student Development, College Chaplain, Financial Aid, Housing, Public Information, Game Room, Commuter Lounge and Study, *The Etownian* and WWEC.

Center for Counseling and Student Development

The Center for Counseling and Student Development supports and assists individuals in their educational, personal, and social development. In educational development the Center helps students to develop effective study skills, to clarify academic and educational goals, and to choose majors. To facilitate exploration of those interests, aptitudes, and abilities which lie behind important academic decisions, the Center uses diagnostic tests and measurements. In personal and social development, the Center helps the student to explore and understand personal identity, attitudes, values, and motivations. Counseling sessions are considered confidential.

Counselors are also responsible for the academic advising of students who have not chosen a major. The staff also conducts a series of small group experiences in a variety of interest and need areas. Interpersonal communication, stress control, assertiveness, time management, and human potential are some of the topics explored in past experiences. Counselors are available for consultation to all members of the college community. The Center for Counseling and Student Development is located in the Baugher Student Center.

Tutor Center

A tutoring service is available to any student experiencing academic difficulty in any course. Students are encouraged to use this service to maintain good academic standing and may sign up at the Center for Counseling and Student Development.

Writing Laboratory

The Writing Laboratory provides individual assistance to students who have immediate and long-term writing problems; it is located in Wenger Center.

Reading/Study Skills Center

The Reading/Study Skills Center provides individualized instruction in study skills and reading comprehension: effective techniques for note-taking from lectures and textbooks, methods of studying for exams and taking them, flexible reading rates and other reading problems. The Reading/Study Skills Center is located in South Hall.

Student Health Center

The College Health Center provides health care for the student population and emergency care for the college community. The Health Center treats minor illnesses and injuries, and encourages health education by offering health-related programs throughout the year. It also handles insurance claim forms for those students who subscribe to the Student Health and Accident Insurance.

Registered nurses are on duty 7:00 a.m.–11:00 p.m. Monday through Friday, and brief office hours are available on Saturday morning. Physician hours are also scheduled. All other hours are covered by an emergency “on call” system. The Health Center refers students to physicians in the community although, of course, students may choose the physician they wish to see. Referrals are also made to other community agencies.

Before registering for freshman classes, students entering Elizabethtown College should file the report of a physical examination and proof of a tuberculosis test performed by their physician. The College will send health forms for physical examination to all inquiring students. The Health Center is located on South Mount Joy Street.

Career Development Center

The Career Development Center is designed to assist students with their career planning, development, and job placement. The office houses a career library, maintains placement credentials, provides off-campus summer and part-time job listings, coordinates on-campus recruitment (business, industry, government, school districts, and graduate school visitations), and publishes a semi-monthly newsletter. The staff conducts and sponsors workshops, clinics, and seminars on various topics, e.g., career decision-making, career planning strategies, employability skills, and finding a job.

Extern Program

Each year, during one week in January, the Career Development Center conducts an Extern Program in concert with the Office of Alumni Relations. The program is designed to help a student choose a particular academic major, confirm a chosen academic major, establish more concrete career goals, or provide a brief on-the-job experience.

The program matches Elizabethtown College students with alumni sponsors who work with the student externs over the designated period of time. The externs receive no academic credit or salary; they do receive valuable first-hand experience in their field.

Campus Ministry

Because the student body of Elizabethtown College comprises individuals from many different religious backgrounds, programs sponsored by the Chaplain's Office are ecumenical in nature.

Major campus-wide religious programming is the responsibility of the Religious Life Committee, a representative body convened by the Chaplain and composed of 12 individuals who represent faculty, administrators, the various organized religious clubs, and the denominational groups on campus. Programs planned by the Chaplain's Office in cooperation with the Religious Life Committee have included such activities as a Jewish Seder, Church of the Brethren Love Feast, emphasis on World Hunger, Bible study, sharing groups, and a weekly Sunday morning worship service.

Organized religious groups on the campus include Brethren Identity, Elizabethtown Christian Fellowship, and the Newman Club.

CAMPUS RESIDENCES

Accommodations

All campus residences feature double occupancy rooms, attractive lobby areas, laundry facilities, and areas for study and recreation.

Founders Residence was completed in 1971, houses 328 men and women in four separate living areas (Beahm, Falkenstein, Hertzler, Zeigler Houses), and features small group living suites.

Schlosser Residence, built in 1965, houses 206 women, and features small group suites with carpeting and air conditioning throughout.

Myer Residence was completed in 1957, houses 130 women, and contains the campus dining room.

Royer Residence, dedicated in 1962, houses 133 women.

Ober Residence, built in 1960, houses 247 men in two wings.

Brinser Residence, dedicated in 1965, houses 144 men.

Cooperative Houses

In addition to the residence hall housing listed above, there are Cooperative Houses for upperclass students. The Cooperative Houses offer alternative small group living arrangements to meet the diverse needs of students in different stages of their college life. In the houses, housekeeping chores are shared, food budgeting and preparation are a part of everyday life, and small group activities are planned by house members.

Commuter Services

Commuters are provided with a multi-purpose room and adjoining study room located on the south end of the second floor of the Baugher Student Center. The Commuter Council is the official representative body of the commuter student. The Commuter Council has as its adviser the Administrative Assistant to the Director of Housing.

Closings

The College will close all of its housing units during all official vacation periods. There will be no access to the buildings during these times.

Four-Year Room Contract

All full-time incoming freshmen who are not residing with parents, legal guardians, or their spouses will be expected to live in campus-owned housing for their complete academic career at Elizabethtown College. The College feels that the experience of living on campus for the full four years of college contributes significantly to a student's educational and social growth. Exceptional circumstances may be reviewed by the Housing Contract Review Committee.

Central Housing Office

The central Housing Office is located in the Student Center. Here the Director of Housing and the Administrative Assistant coordinate the entire housing operation.

Within each residence hall area, the person responsible is the *Area Coordinator*. Responsible directly to the Director of Housing, the Area Coordinator supervises resident assistants and house management, advises residence hall councils and programs, enforces all residence hall and campus regulations, and cares for the welfare of each individual student in the residence hall.

Within each residence hall, an upperclass student called a *Resident Assistant* is in charge of each floor. Responsible directly to the Area Coordinator, the Resident Assistant must show interest and friendliness to all students on the floor and enthusiasm for activities planned with floor members, serve duty at the reception desk, handle other administrative functions in the residence hall, and enforce all residence hall and campus regulations.

Each residence hall has a *Residence Hall Council*, made up of students elected from each floor. Their primary responsibilities are to determine residence hall regulations within college guidelines, to channel residents' concerns to the Student Senate in the form of proposals, and to plan academic, cultural, social, and recreational programming for the residence hall.

STUDENT RIGHTS AND RESPONSIBILITIES

Membership in the Elizabethtown College community accords the student certain privileges and rights along with accompanying responsibilities. In an effort to ensure and protect the right to pursue the educational process, the college community as a whole must be sensitive to the welfare and behavior of its individual members.

The student assumes responsibility for awareness of and compliance with all existing rules, policies, public laws, and regulations as stated in the college catalog, student handbook, and any other official publication of the College. All new students receive a copy of *The Rudder*, the student handbook, during new student orientation.

Family Educational Rights and Privacy Act of 1974

Elizabethtown College affirms the Student's Family Rights and Privacy Act (the Buckley Amendment) which protects students' rights of access to any college records directly relating to them. Guidelines are found in the student handbook.

Title IX of the Educational Amendment Act of 1972

Elizabethtown College affirms the Title IX statute which prohibits sex discrimination in any educational program or activity receiving federal financial assistance. A Title IX Committee exists to ensure compliance with the statute. A grievance procedure for Title IX concerns is outlined in the student handbook.

THE JUDICIAL SYSTEM

The Campus Judicial Board and the Appeals Board, composed of students, faculty, and administrators, have jurisdiction over violations of campus rules, policies, and regulations. The College embraces the principles of due process and individual student responsibility, and therefore initial efforts to settle violations are made individually at the lowest level of responsibility. Only when the matter cannot be resolved on a lower level is it referred to the appropriate board.

Alcohol

The College supports the statutes of the Commonwealth of Pennsylvania controlling the possession and use of alcoholic beverages by individuals under 21 years of age. It is contrary to the policy of the College for students of any age to purchase, possess, store, sell, or consume alcoholic beverages while under college jurisdiction.

Drugs

The College supports the local, state, and federal laws which make the possession, purchasing, distribution, and use of certain drugs illegal. Neither the College nor its students enjoy immunity from the statutes or their enforcement. Disregard of public laws by students on campus is a serious violation of college policy and regulations.

Firearms, Weapons

Use of firearms, weapons, explosives, or noxious chemicals except in strict adherence to the laws of the Commonwealth of Pennsylvania or as part of the student's formal education is prohibited. Any weapons, firearms, or ammunition brought to the campus must be registered and deposited with the Department of Public Safety.

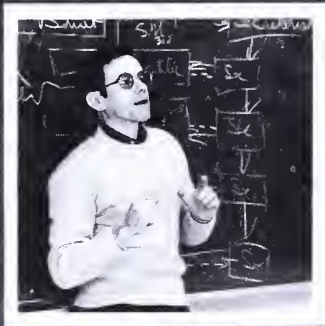
Motor Vehicles

Students are permitted motor vehicles on campus. All motor vehicles must be registered with the Department of Public Safety. Student must obtain parking decals and are bound by the motor vehicle regulations set forth in the manual published by the Department of Public Safety and distributed at registration time.

Smoking

For reasons of personal health, the College does not encourage the use of tobacco. Smoking is prohibited in classrooms, hallways, the dining room, the snack bar, lounges, and other places open to public gatherings, except residence halls.

Directory



Directory

THE FACULTY

Mark C. Ebersole, *President*

B.S., LL.D., Elizabethtown College; B.D., Crozer Theological Seminary; M.A., University of Pennsylvania; Ph.D., Columbia University (1977)

Bruce L. Wilson, *Dean of the Faculty, Associate Professor of English*

B.A., B.S., M.S., Kansas State University; Ph.D., University of Minnesota (1977)

Emeriti

Charles S. Appgar, *Professor of Biology, Emeritus*

B.S., M.S., Ph.D., University of Pittsburgh (1946)

Carl J. Campbell, *Professor of English, Emeritus*

A.B., Franklin and Marshall College; M.A., University of Pennsylvania (1962)

Clarence G. Enterline, *Alumni Secretary and Director of Placement, Emeritus*

B.S., Albright College; M.S., University of Pennsylvania (1956)

Nevin W. Fisher, *Professor of Music, Emeritus*

Graduate, Blue Ridge College; Teachers' Certificate, Peabody Conservatory of Music; B.M. Eastman School of Music, University of Rochester; M. Music, Northwestern University (1951)

Elizabeth M. Garber, *Professor of Political Science, Emerita*

A.B., LL.D., Hood College; M.A., George Washington University; Docteur de l'Université, University of Paris (1966)

Vera R. Hackman, *Dean of Women, Emerita*

A.B., Elizabethtown College; A.M., Columbia University; Professional Diploma, Teachers' College, Columbia University (1944)

Ira R. Herr, *Professor of Physical Education, Emeritus*

A.B., Franklin and Marshall College; University of Pennsylvania; Temple University (1928)

Kathryn Nisley Herr, *Assistant Professor of Modern Languages, Emerita*

A.B. Lebanon Valley College (1943)

Earl H. Kurtz, *Treasurer Emeritus*

B.S., Elizabethtown College; M.A., New York University (1957)

Morley J. Mays, *President Emeritus*

A.B., Juniata College; A.M., University of Pittsburgh; Ph.D., University of Virginia; D.D., Bethany Theological Seminary; L.L.D., Elizabethtown College; L.H.D., Albright College (1966)

Gertrude Royer Meyer, *Professor of Music, Emerita*

Graduate in Music, Western Maryland College (1920)

O. F. Stambaugh, *Professor of Chemistry, Emeritus*

B.S., Lebanon Valley College; M.S., Ph.D., Pennsylvania State University (1946)

Carl W. Zeigler, *Professor of Religion and Philosophy, Emeritus*

A.B., Elizabethtown College; M.Div., United Theological Seminary; D.D., Elizabethtown College (1959)

Professors

Edgar T. Bitting, *Professor of Business*

B.S., Elizabethtown College; M.B.A., University of Pennsylvania; C.P.A. (1952)

Ernest A. Blaisdell, Jr., *Professor of Mathematics*

B.A., M.A., University of Maine; Ph.D., Temple University (1968)

I. L. Bossler, *Professor of Mathematics*

B.S., Ursinus College; M.S., Purdue University (1959)

John A. Campbell, Jr., *Professor of English*

B.S., M.A., Ph.D., University of Florida (1968)

Anna M. Carper, *Director of the Library*

A.B., Elizabethtown College; M.S., Columbia University (1960)

Eugene P. Clemens, *Professor of Religion and Philosophy, Department Chairman*

B.A., Goshen College; M.A., Ph.D., University of Pennsylvania (1965)

J. Thomas Dwyer, *Professor of English*

A.B., M.A., Ph.D., University of Pennsylvania (1960)

J. Robert Heckman, *Associate Professor of Biology*

B.S., Elizabethtown College; M.Ed., Millersville State College; Ph.D., Pennsylvania State University (1964)

Jack L. Hedrick, *Professor of Chemistry*

B.S., Elizabethtown College; M.S., University of Pittsburgh (1963)

A. F. Kish, *Professor of Business, Program Director, Continuing Education*

B.S., Rutgers-The State University; M.S., University of Delaware (1963)

Note: year indicates date of appointment at the College.

Donald E. Koontz, *Professor of Mathematics*

B.S., Juniata College; M.A., Pennsylvania State University; Ed.D. Temple University (1961)

J. Kenneth Kreider, *Professor of History, Department Chairman*

A.B., Elizabethtown College; M.A., Ph.D., Pennsylvania State University (1964)

Henry M. Libhart, *Professor of Art, Department Chairman*

A.B., Franklin and Marshall College; Equivalent Master's Degree certificate, Commonwealth of Pennsylvania (1959-64, 1967)

Richard L. Mumford, *Professor of History and Clinical Professor in Social Science*

A.B., University of Pennsylvania; M.Ed., Ph.D., University of Delaware (1965)

Rollin E. Pepper, *Professor of Biology*

A.B., Earlham College; M.S., Syracuse University; Ph.D., Michigan State University (1964)

Zoe G. Proctor, *Professor of Chemistry*

B.S., Elizabethtown College; M.S., Bucknell University (1959)

William V. Puffenberger, *Professor of Religion and Philosophy*

B.A., Bridgewater College; B.D., Bethany Theological Seminary; Ph.D., Boston University (1967)

John P. Ranck, *Professor of Chemistry*

B.S., Elizabethtown College; M.A., Ph.D., Princeton University (1963)

D. Paul Rice, *Professor of Education, Department Chairman*

A.B., Elizabethtown College; M.S., Ed.D., Temple University (1963)

Jobie E. Riley, *Professor of Communication Arts*

B.A. Manchester College; M.Div., Bethany Theological Seminary; Ph.D., Temple University (1961)

Austin D. Ritterspach, *Professor of Religion and Philosophy*

B.A., Indiana University; M.Div., Union Theological Seminary; Ph.D., Graduate Theological Union (1967)

Ronald L. Shubert, *Professor of Mathematics, Department Chairman; Computer Science Chairman*

B.S., Elizabethtown College; M.A., University of Kansas; D.Ed., Pennsylvania State University (1964)

Carl N. Shull, *Professor of Music*

B.S., Bridgewater College; M.M., Northwestern University; Ph.D., Florida State University (1961)

Armon C. Snowden, *Professor of Religion and Philosophy*

A.B., Elizabethtown College; B.D., Crozer Theological Seminary (1957)

Martin O. L. Spangler, *Professor of Chemistry*

B.A., Bridgewater College; M.S., Ph.D., Virginia Polytechnic Institute and State University (1966)

Stanley T. Sutphin, *Professor of Religion and Philosophy, Faculty Marshal*

A.B., University of LaVerne; B.D. Bethany Theological Seminary; Th.D., Pacific School of Religion (1963)

Thomas R. Winpenny, *Professor of History*

B.A., M.A., Pennsylvania State University; Ph.D., University of Delaware (1968)

Owen L. Wright, *Professor of Physical Education*

B.A., Bridgewater College; M.S., University of Illinois; Ph.D., University of Oregon (1961)

Robert E. Ziegler, *Professor of Science Education*

B.A., Bridgewater College; M.R.E., Bethany Theological Seminary; M.S., Ph.D., University of Wisconsin (1966)

Associate Professors

Hooshang Bagheri, *Visiting Associate Professor of Education*

B.S., M.Ed., Ph.D., University of Oregon (1979)

Louise Baugher Black, *Associate Professor of English, Clinical Professor in English Education*

B.S., Elizabethtown College; M.S., Temple University (1968)

Stanley K. Bowers, *Associate Professor of Education*

B.S., Millersville State College; M.Ed., Temple University (1965)

Jay R. Buffenmyer, *Associate Professor of Business, Department Chairman*

B.S., Elizabethtown College; M.P.I.A., Ph.D., University of Pittsburgh (1976)

Carl A. Callenbach, *Associate Professor of Education*

B.S., Pennsylvania State University; M.A., Appalachian State University; D.Ed., Pennsylvania State University (1972)

Hubert M. Custer, *Associate Professor of Physics, Department Chairman*

B.S., Carnegie-Mellon University; M.S., Franklin and Marshall College (1953-61, 1963)

Uldis Daiga, *Associate Professor of Modern Languages, Acting Department Chairman*

B.S., University of North Carolina; M.A., Temple University (1965)

- Paul M. Dennis**, *Associate Professor of Psychology*
B.A., Bowdoin College; M.A., Ph.D., New School
for Social Research (1968)
- James L. Dively**, *Associate Professor of Biology*
B.S., M.S., Ph.D., Pennsylvania State University
(1973)
- Robert D. Dolan**, *Associate Professor of Mathe-
matics, Clinical Professor in Mathematics*
B.S., California State College; M.A., West Virginia
University (1964)
- Darrell R. Douglas**, *Associate Professor of Music*
B.S., University of Minnesota; M.A., Arizona State
University; D.M.A., University of Southern Cali-
fornia (1972)
- Russell E. Eisenbise**, *Associate Professor of
Sociology*
B.S., McPherson College; M.A., Temple University
(1962)
- Delbert W. Ellsworth**, *Associate Professor of Psy-
chology, Department Chairman*
A.B., University of California; M.A., San Francisco
State College; Ph.D., University of California
(1970)
- Martha A. Eppley**, *Associate Professor of Econom-
ics, Associate Dean of the Faculty for Student Af-
fairs*
B.S., Elizabethtown College; M.B.A., Indiana Uni-
versity (1964)
- Hugh G. Evans, Jr.**, *Associate Professor of Eco-
nomics*
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University (1968)
- Boyd Fox**, *Associate Professor of Education*
B.S., M.S., Ed.D., Utah State University (1970)
- E. Margaret Gabel**, *Assistant to the Director of the
Library and Head Cataloguer*
B.S., Kutztown State College; M.S.L.S., Syracuse
University (1966)
- George A. Gliptis**, *Associate Professor of Business*
B.S., J.D., University of Virginia (1970)
- Suzanne Schmidt Goodling**, *Associate Professor
of Modern Languages*
B.A., Gettysburg College; M.A., Middlebury Col-
lege (1964)
- John F. Harrison**, *Associate Professor of Music*
B.M., M.M., Florida State University; Ph.D., Bryn
Mawr College (1967)
- Frederic E. Hoffman**, *Associate Professor of Biol-
ogy and Clinical Professor in Science*
B.A., M.S., Ph.D., Syracuse University (1969)
- Otis D. Kitchen**, *Associate Professor of Music*
B.S., Bridgewater College; M.M., Northwestern
University (1965)
- John E. Koontz, Jr.**, *Associate Professor of Mathe-
matics*
B.S., Juniata College; M.A., Bowling Green State
University (1966)
- Donald B. Kraybill**, *Associate Professor of Sociolo-
gy, Department Chairman*
B.A., Eastern Mennonite College; M.A., Ph.D.,
Temple University (1971)
- Carroll H. Kreider**, *Associate Professor of Busi-
ness and Clinical Professor of Business Education*
B.S., Elizabethtown College; M.Ed., Pennsylvania
State University (1969)
- Robert E. Lamontagne**, *Associate Professor of
Political Science*
A.B., St. Anselm's College; A.M., University of
Pennsylvania; Ph.D., University of Maryland
(1967)
- Ronald L. Laughlin**, *Associate Professor of Biolo-
gy, Department Chairman*
B.A., Wabash College; M.S., Ohio State University
(1968)
- R. Bruce Lehr**, *Associate Professor of Sociology*
A.B., Bucknell University; M.A., Mexico City Col-
lege (1961)
- J. Henry Long**, *Associate Professor of Sociology,
Associate Dean of the Faculty for Continuing Edu-
cation*
B.S., Elizabethtown College; M.A., Temple Uni-
versity; B.D., D.D., Bethany Theological Seminary
(1969)
- Robert K. Morse**, *Associate Professor of Mathe-
matics*
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University (1968)
- Stanley R. Neyer**, *Associate Professor of Business*
B.S., Elizabethtown College; M.B.A., Shippens-
burg State College; C.P.A. (1964)
- D. Kenneth Ober**, *Associate Professor of Physical
Education, Department Chairman and Athletic Di-
rector*
B.S., M.S., West Chester State College (1964)
- Frank P. Polanowski**, *Associate Professor of
Biology*
B.S., Wilkes College; M.Ed., Ph.D., Pennsylvania
State University (1977)

H. Marshall Pomroy, *Associate Professor of Business*

B.S., Elizabethtown College; M.Ad., Pennsylvania State University; C.P.A. (1964)

Sharon H. Raffield, *Associate Professor of Social Work, Program Director*

A.B., Wheaton College; M.S.W., Washington University (1972)

Raymond R. Reeder, *Associate Professor of Chemistry, Department Chairman*

B.S., Case Western Reserve University; Ph.D., Brown University (1969)

Elisabeth D. Shaw Russell, *Associate Professor of English, Department Chairperson*

B.A., M.A., Oxford University (1969)

Wayne A. Selcher, *Associate Professor of Political Science, Department Chairman*

A.B., Lebanon Valley College; M.A., Ph.D., University of Florida (1969)

Charles D. Schaeffer, Jr., *Associate Professor of Chemistry*

B.A., Franklin and Marshall College; Ph.D., State University of New York at Albany (1976)

Harry L. Simmers, *Associate Professor of Music, Department Chairman*

B.S., Bridgewater College; M.M., American Conservatory of Music (1966)

Donald E. Smith, *Associate Professor of Communication Arts, Department Chairman*

B.S., M.S., State University College at Geneseo (1969)

John W. Stites, *Associate Professor of Music*

B.S., Manchester College; M.M., Wayne State University (1968)

Glenn H. Thompson, Jr., *Associate Professor of Earth Science*

B.S., Indiana University of Pennsylvania; M.Ed., Pennsylvania State University (1969)

Bela Vassady, Jr., *Associate Professor of History*

B.S., Pennsylvania State University; M.A., Ph.D., Temple University (1971)

Richard M. Zugarek, *Associate Professor of Computer Science*

B.S., M.Phil., Leicester Polytechnic (U.K.)

Assistant Professors

Richard L. Bowman, *Assistant Professor of Physics*

B.S., Eastern Mennonite College; M.A., Kent State University; Ph.D., Oregon State University (1980)

J. Sue Dolan, *Assistant Professor of Business, Associate Department Chairman*

B.S., Elizabethtown College; M.Ed., Shippensburg State College (1974)

Robert G. Garrett, *Assistant Professor of Health and Physical Education*

B.S., East Stroudsburg State College; Ed.M., Temple University (1967)

Donna E. Gaver, *Assistant Professor of Education*

B.S., Tufts University; M.Ed., Ed.D., University of Virginia (1978)

Doris Gordon, *Assistant Professor of Occupational Therapy*

B.S., M.S., University of Pennsylvania; O.T.R. (1972)

Maurice R. Hoppie, *Assistant Professor of Economics*

B.A., Knoxville College; M.S., University of Tennessee (1980)

David Iacono-Harris, *Assistant Professor of Social Work*

B.A., St. Francis College; M.S.S.W., University of Wisconsin; Ph.D., University of Tennessee (1978)

Yvonne E. Kauffman, *Assistant Professor of Physical Education*

B.S., Bridgewater College; M.Ed., West Chester State College (1966)

Thomas R. Leap, *Assistant Professor of Computer Science*

B.S., Elizabethtown College; M.S., Lehigh University (1979)

W. Wesley McDonald, *Assistant Professor of Political Science*

B.A., Towson State University; M.A., Bowling Green State University (1980)

Judith A. McLaughlin, *Assistant Professor of Psychology*

B.A., George Mason University; M.A., Ph.D., Clark University (1980)

Donna T. Mottilla, *Assistant Professor of Business*

B.A., M.S., M.B.A., Shippensburg State College (1980)

Donald G. Muston, *Assistant Professor of Business*

B.S., M.B.A., Indiana University; B.I.M., American Graduate School of International Management (1977)

H. Herbert Poole, Jr., *Assistant Professor of History*

B.A., Franklin and Marshall College; M.A., University of Pennsylvania; Ph.D., University of Delaware (1969)

John Rohrkemper, *Assistant Professor of English*
B.A., M.A., Ph.D., Michigan State University
(1981)

H. Andrew Sagar, III, *Assistant Professor of Psychology*
B.A., The American University; M.Div., Duke University; M.S., Ph.D. University of Pittsburgh
(1980)

Carmine T. Sarracino, *Assistant Professor of English*
B.A., Rhode Island College; M.A., Ph.D., University of Michigan (1973)

Donald P. Smith, *Assistant Professor of Physical Education*
B.S., University of Mississippi (1972)

William Leigh Taylor, Jr., *Assistant Professor of English, Assistant to the President*
B.A., University of the South; M.A., Ph.D., University of Virginia (1977)

Randolph L. Trostle, *Assistant Professor of Business*
B.S., Elizabethtown College; M.Ed., M.B.A., Shippensburg State College (1972)

Barbara C. Tulley, *Assistant Professor in Computer Science, Coordinator of Academic Computing Services*
B.S., St. Bonaventure University; M.S., Worcester Polytechnic Institute (1974)

Joseph A. Whitmore, *Assistant Professor of Physical Education*
B.A., Bridgewater College (1968)

Instructors

David R. Griswold, *Instructor in Business*
B.A., M.A., Bowling Green State University; M.B.A. University of Cincinnati (1981)

Gail A. Richert, *Instructor in Occupational Therapy*
B.S., University of Pennsylvania; M.S., Temple University; O.T.R. (1980)

Reba M. Sebelist, *Instructor in Occupational Therapy*
B.S., Elizabethtown College; M.S., University of Pennsylvania; O.T.R. (1977)

Samuel C. Weaver, *Instructor in Business*
B.S., M.B.A., Lehigh University (1981)

Laura A. Fuller, *Clinical Field Work Coordinator in the Department of Occupational Therapy*
B.S., Ohio State University; O.T.R. (1980)

ADJUNCT FACULTY

Medical Technology

Susanta Bhattacharje at Harrisburg Hospital, Harrisburg
M.D., University of Birmingham

Margaret Black at Harrisburg Polyclinic Hospital, Harrisburg
B.S., Lebanon Valley College; M.T. (ASCP)

Susan Dellinger at St. Joseph Hospital, Lancaster
M.S., Temple University, M.T. (ASCP)

John W. Eiman at Abington Memorial Hospital, Abington
M.D., University of Pennsylvania School of Medicine

Leona Fierszt at West Jersey Hospital, Voorhees, NJ
B.A., Glassboro State College, M.T. (ASCP)

Janice Fogleman at Harrisburg Hospital, Harrisburg
B.S., Elizabethtown College; M.T. (ASCP)

Nadine Gladfelter at Lancaster General Hospital, Lancaster
M.S., Temple University, M.T. (ASCP)

Brenda Kile at York Hospital, York
M.S., Central Michigan University, M.T. (ASCP)

Ward M. O'Donnell at Lancaster General Hospital, Lancaster
M.D., Georgetown Medical School

Julian W. Potok at Harrisburg Polyclinic Hospital, Harrisburg
D.O., Philadelphia College of Osteopathic Medicine

Barbara Scheelje at Abington Hospital, Abington
B.S., Colby-Sawyer College; M.T. (ASCP)

Simon Soumerai at West Jersey Hospital, Voorhees, NJ
M.D., University of Geneva, Switzerland

William Umiker at St. Joseph Hospital, Lancaster
M.D., State University of New York at Buffalo

John P. Whiteley at York Hospital, York
M.D., Temple University School of Medicine

Occupational Therapy

Margaret E. Alexander at Harrisburg Community Mental Health Center, Harrisburg
Certificate in Occupational Therapy, University of Pennsylvania; O.T.R.

- Phyllis E. Breuninger** at Coatesville Veterans Medical Center, Coatesville
Certificate in Occupational Therapy, University of Pennsylvania; O.T.R.
- Vicky Candio** at New Jersey Rehabilitation Hospital, East Orange, N.J.
B.S., Columbia University; O.T.R.
- Jean Cannella** at Betty Bacharach Rehabilitation Hospital, Pomona, N.J.
M.O.T., Texas Women's University; O.T.R.
- Carol DeLapp** at Reading Rehabilitation Hospital, Reading
B.S., Quinnipiac College; O.T.R.
- Joanne M. Dileo** at Good Shepherd Rehabilitation Hospital, Allentown
B.S., Temple University; O.T.R.
- Glenda J. Dougherty** at St. Joseph's Hospital, Lancaster
B.S., Virginia Commonwealth University; O.T.R.
- Mark Dreibelbis** at St. Joseph's Hospital, Reading
B.S., Elizabethtown College; O.T.R.
- Rachel E. Dyrud** at Temple University Hospital, Philadelphia
B.S., University of North Dakota; O.T.R.
- James Everhart** at Reading Rehabilitation Hospital, Reading
B.S., Loma Linda University; O.T.R.
- Cathy L. Fornwalt** at Veteran's Administration Medical Center, Coatesville
B.S., Temple University; O.T.R.
- Elizabeth Fowler** at Heatherbank, Columbia
B.S., M.S., Virginia Commonwealth University, O.T.R.
- Marian Giermann** at All Saints Hospital, Wyndmoor
B.S., Temple University; O.T.R.
- Brenda Glick** at Veteran's Administration Medical Center, Lebanon
B.S., Elizabethtown College, O.T.R.
- Nora Goldberg** at Thomas Jefferson University Hospital, Philadelphia
B.S., State University of New York at Buffalo; O.T.R.
- Michael D. Goodling** at Harrisburg Polyclinic Hospital, Harrisburg
B.S., University of Illinois; O.T.R.
- Christine L. Hischmann** at Tunkhannock Counseling Center, Tunkhannock
B.S. Temple University; O.T.R.
- Margaret Howison** at Elizabethtown Center for Children and Youth, Elizabethtown
B.S., Virginia Commonwealth University, O.T.R.
- Shirley A. Kreiser** at Veterans Administration Hospital, Lebanon
B.S., M.A., Columbia University; O.T.R.
- Margaret Kujawa** at Colonial Manor Nursing Home, York
B.S., Temple University; O.T.R.
- Penny Kyler** at Springfield Hospital Center, Sykesville, MD
B.S., Virginia Commonwealth University; O.T.R.
- Nancy Lewis** at Friend's Hospital, Philadelphia
B.S., Virginia Commonwealth University; O.T.R.
- Donna Lucke** at The Sheppard and Enoch Pratt Hospital, Towson, MD
B.A., College of St. Catherine; O.T.R.
- Michelle McArdle** at Eugenia Hospital, Lafayette Hills
Certificate in Occupational Therapy, University of Pennsylvania; O.T.R.
- Shelley McCarthy** at The Kessler Institute for Rehabilitation, West Orange, N.J.
B.S., Tufts University; O.T.R.
- Kathleen McFail** at Veteran's Administration Medical Center, Lebanon
B.S., University of Pennsylvania, O.T.R.
- Donald L. Maud** at Veterans Administration Medical Center, Lebanon
B.S., Ohio State University; O.T.R.
- Ramona Monaco** at Westmoreland Hospital Community Mental Health Center, Greensburg
M.S., University of Pittsburgh; O.T.R.
- Pamela Moore** at St. Lawrence Rehabilitation Center, Lawrenceville, N.J.
B.S., Quinnipiac College; O.T.R.
- Barbara Morgan** at Abington Memorial Hospital, Abington
M.O.T., Texas Women's University; O.T.R.
- Bernice B. Moss** at Veterans Administration Medical Center, Philadelphia
B.S., University of Pennsylvania; O.T.R.
- Eleanor Nucelli** at Our Lady of Lourdes Hospital and Rehabilitation Center, Camden, N.J.
M.A., University of Pennsylvania; O.T.R.
- Lynne Richard** at Muhlenburg Hospital, Plainfield, N.J.
B.S., University of Kansas; O.T.R.

- Susan Sapienza** at Delaware House, Burlington, N.J.
B.S., University of Pennsylvania; O.T.R.
- Jean Savina** at Elizabethtown Hospital for Children and Youth, Elizabethtown
B.S., M.S., Virginia Commonwealth Institute; O.T.R.
- Margaret Schultz** at New Jersey Rehabilitation Hospital, East Orange, N.J.
B.S., Columbia University; O.T.R.
- Dhun G. Sharma** at Temple University Hospital, Philadelphia
B.S., New York University; O.T.R.
- Elizabeth Smith** at Eastern Maine Medical Center, Bangor, ME
B.S., University of New Hampshire; O.T.R.
- E. Anne Spencer** at Harnmarville Rehabilitation Center, Pittsburgh
B.A., University of Pennsylvania; O.T.R.
- Nancy Strub** at Thomas Jefferson University Hospital, Philadelphia
B.S., Virginia Commonwealth University; O.T.R.
- Donna Sweeney** at Institute of Pennsylvania Hospital, Philadelphia
B.A., College of St. Catherine; O.T.R.
- Carol Tengdin** at Haverford State Hospital, Haverford
B.S., University of Illinois; O.T.R.
- Mary Teeter** at The Reading Hospital and Medical Center, Reading
B.S., University of New Hampshire; O.T.R.
- Kim Vogel** at Eugenia Hospital, Lafayette Hills
M.S., Columbia University; O.T.R.
- Katie Walsh** at Brook Lane Psychiatric Treatment Center, Hagerstown, MD
B.S., Virginia Commonwealth University; O.T.R.
- Diane Weiss** at New Jersey Rehabilitation Hospital, East Orange, N.J.
B.S., University of Western Ontario; O.T.R.
- Gale Wenk** at Crozer Chester Medical Center, Chester
B.S., Temple University; O.T.R.
- Karen Westphal** at Veterans Administration Medical Center, Fort Howard, MD
B.S., Towson State University; O.T.R.
- Ernestine R. Whiting** at Veterans Administration Medical Center, Coatesville
B.S., Cornell University; O.T.R.
- Wilma J. Wiener** at Norristown State Hospital, Norristown
B.A., University of Pennsylvania; O.T.R.
- Judith Doss Wilcox** at Allied Services, Scranton
B.D., Loma Linda University; O.T.R.
- Social Work**
- Jacques Blackman** at Lancaster County Prison, Lancaster
B.S., Millersville State College
- Karen Boyer** at Holy Spirit Community Mental Health Center, Camp Hill
B.S.W., Temple University
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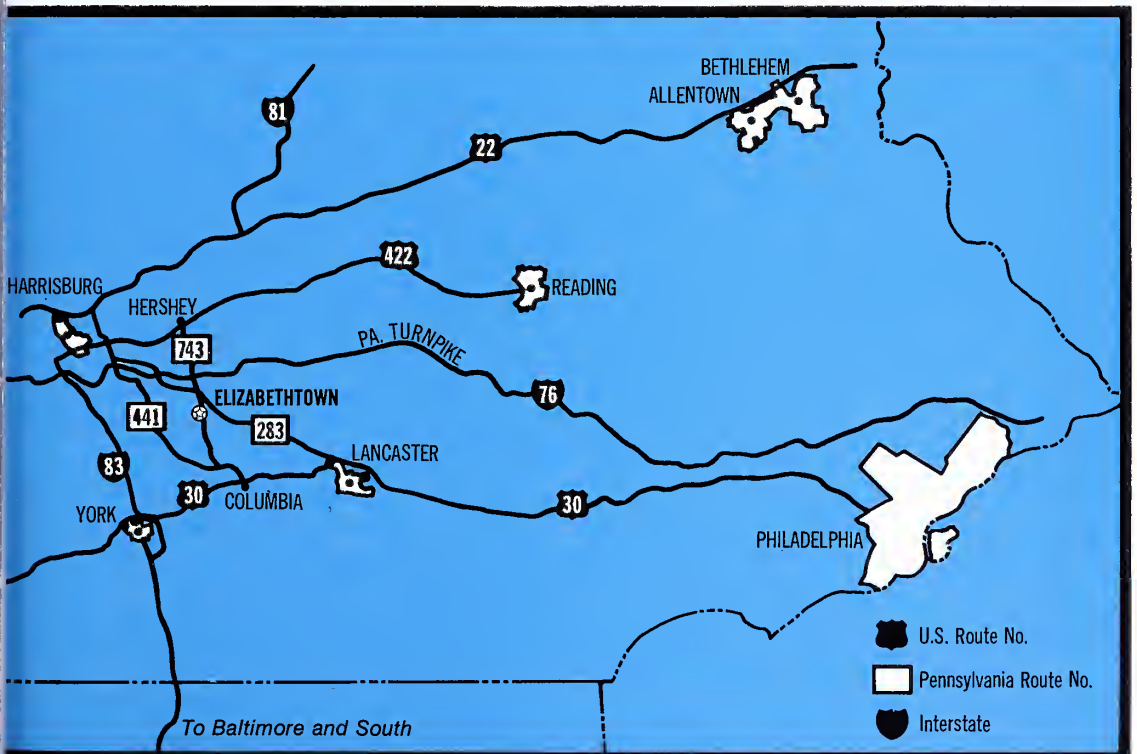
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Elizabethtown College



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Office of the Assistant to the President Catherine L. O'Shea, <i>Assistant to the President</i>	Alpha Hall	186
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Office of the Director of Conferences Lauretta Hynicker, <i>Director</i>	Alpha Hall	246
Office of the Vice-President for Development James Brucker, <i>Vice-President</i>	Alpha Hall	155
Office of Continuing Education J. Henry Long, <i>Associate Dean</i>	Nicarry Hall	291
Office of the Dean of Faculty J. Thomas Dwyer, <i>Acting Dean*</i> Frederick F. Ritsch, <i>Dean**</i>	Alpha Hall	187
Office of the President Mark C. Ebersole, <i>President</i>	Alpha Hall	193
Office of the Registrar Donald L. Neiser, <i>Registrar</i>	Alpha Hall	211
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Office of the Treasurer Thomas J. Kingston, <i>Treasurer</i>	Alpha Hall	181

**Through December 31, 1983*

***Effective January 1, 1984*

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Calendar 1983-84

FALL SEMESTER

Aug. 25-29	Faculty Meetings and Orientation
Aug. 27	Freshmen Arrive
Aug. 29	Upperclassmen Arrive
	Registration Day
Aug. 30	Day classes begin
	Fall Convocation
Aug. 31	Evening classes begin
Sept. 3	Saturday classes begin
Sept. 5	Labor Day—No classes
Oct. 7	Reading Day
Oct. 8	Saturday classes meet
Oct. 14	Midterm
Oct. 15	Homecoming
Nov. 23	Thanksgiving Recess begins 2:00 p.m.
Nov. 26	No Saturday classes
Nov. 28	Classes resume 8:00 a.m.
Dec. 6	Monday schedule of day classes
	Tuesday schedule of evening classes
Dec. 7	Friday schedule of day classes
	Wednesday schedule of evening classes
Dec. 9	Day classes end
Dec. 10	Reading Day a.m. (Regular Day classes)
	Saturday classes end
Dec. 10-21	Final Exams (Day)
Dec. 12	Evening classes end
Dec. 13-19	Final Exams (Evening)

SPRING SEMESTER

Jan. 13-16	Faculty Meetings and In-Service Programs
Jan. 16	Registration
Jan. 17	Day classes begin
Jan. 19	Evening classes begin
Jan. 21	Saturday classes begin
Feb. 17	Reading Day
March 2	Midterm
	Spring recess begins 5:00 p.m.
March 10	No Saturday classes
March 12	Classes resume 8:00 a.m.
April 19	Easter recess begins 5:00 p.m.
April 23	Evening classes meet
April 24	Day classes resume 8:00 a.m.
May 1	Monday schedule of day classes
	Tuesday schedule of evening classes
May 2	Friday schedule of day classes
	Wednesday schedule of evening classes
May 3	Friday schedule of day classes
	Day classes end
	Evening classes end
May 4	Reading Day
May 5-15	Final Exams (Day)
May 5	Saturday classes end
May 7-12	Final Exams (Evening and Saturday)
May 19	Commencement

SUMMER SESSIONS

May 21-June 22	Summer Session I
June 25-July 27	Summer Session II
June 11-July 27	Evening Summer Session

Calendar 1984–85

FALL SEMESTER

Aug. 23–27	Faculty Meetings and Orientation	Jan. 19	Saturday classes begin
Aug. 25	Freshmen Arrive	Feb. 15	Reading Day
Aug. 27	Upperclassmen Arrive	Mar. 1	Midterm
	Registration Day		Spring recess begins 5:00 p.m.
Aug. 28	Day classes begin	March 9	No Saturday classes
	Fall Convocation	March 11	Classes resume 8:00 a.m.
Aug. 29	Evening classes begin	April 4	Easter recess begins 5 p.m.
Sept. 1	Saturday classes begin	April 6	No Saturday classes
Sept. 3	Labor Day—No classes	April 8	Evening classes meet
Oct. 6	Homecoming	April 9	Day classes resume 8:00 a.m.
Oct. 12	Reading Day	April 30	Monday schedule of day classes
Oct. 13	Saturday classes meet		Tuesday schedule of evening classes
Oct. 15	Midterm		Friday schedule of day classes
Nov. 21	Thanksgiving recess begins 2:00 p.m.	May 1	Wednesday schedule of evening classes
Nov. 24	No Saturday classes		Friday schedule of day classes
Nov. 26	Classes resume 8:00 a.m.	May 2	Thursday schedule of evening classes
Dec. 4	Monday schedule of day classes		Day and evening classes end
	Tuesday schedule of evening classes	May 3	Reading Day
Dec. 5	Friday schedule of day classes	May 4–14	Final Exams (Day)
	Wednesday schedule of evening classes	May 4	Saturday classes end
Dec. 7	Day classes end	May 6–11	Final Exams (Evening and Saturday)
Dec. 8	Reading Day a.m.		Commencement
	Saturday classes end		
Dec. 8–19	Final Exams (Day)		
Dec. 10	Evening classes end		
Dec. 11–17	Final exams (Evening and Saturday)		

SUMMER SESSIONS

SPRING SEMESTER

Jan. 10–14	Faculty Meetings and In-Service Programs	May 20–June 21	Summer Session I
Jan. 14	Registration	June 24–July 26	Summer Session II
Jan. 15	Day classes begin	June 10–July 26	Evening Summer Session
Jan. 17	Evening classes begin		

Statement of Purpose

The purpose of Elizabethtown College has historically been expressed in the phrase, "Educate for service." The College provides an education which should enable the student to develop as an intelligent and moral citizen who can be a productive member of society. The College affirms a relationship between those academic disciplines which primarily prepare students with the mental skills and specialized knowledge to undertake successful personal careers in business, industry, and the professions; and those disciplines which primarily foster the knowledge of cultural heritage, the ability to communicate effectively, the capacity for long-term and continuous self-education for reflective moral and spiritual powers of mind, and for a deep sense of personal integrity. Ideally, Elizabethtown College graduates should be able to serve themselves and others freely and responsibly in an environment characterized by social, cultural, ethical, spiritual, and physical uncertainties. The College seeks to foster that balanced pragmatic mixture of professional and humanistic studies that has historically characterized liberally educated men and women.

The achievement of ideal balance of curricular studies for undergraduate students depends upon diversity of intellectual enquiry and outlook by both teachers and students within the disciplines represented in its curriculum, and upon variety of responsible expression of scholarly opinion. The College welcomes a mixture of students of varied ages, backgrounds, traditions, interests and needs, as these can be accommodated within the existing curriculum. It commits itself to fostering excellence in educational achievement and to strengthening intellectual curiosity.

an overview of Elizabethtown College





a place to live, to learn, to launch a career

Clearly, it is important that as a prospective student you should become aware of the academic policies and regulations of the College, along with the curricula and course descriptions, the costs and admissions policies, and all the other facts that this catalog contains.

However, it is equally important that you begin to think about the *place* that is Elizabethtown College. Any place in which for over 80 years men and women have gathered to live and to study in community must have its own special atmosphere. Certainly Elizabethtown does. Broadly, this atmosphere arises from the excellence and the human concern of its professors, the quality of the students and of the life they share, the learning which is nourished here, and the lives and careers which that learning in turn begets.

However, a still more particular description of the College seems in order, and the "overview" which follows is an attempt to describe to you this place in which so many students have lived, learned, and launched their careers.

A PLACE TO LIVE

In 1899 students and faculty first joined together to form the academic community that is Elizabethtown College. Since that time they have committed themselves to an educational philosophy which asserts the union of all aspects of college life. Life outside the classroom—both for students and faculty—should be as challenging and rewarding as the studying that goes on within. For both of these aspects of college life comprise *learning*, that journey of self-discovery and self-realization which leads a man to know himself as completely as he can—in his relations with himself, his fellow men, his god.

To begin to know yourself completely you must have as complete an experience of living as you can. This experience is extremely important if, like most entering freshmen, you look forward to college as your first chance to stand on your own, to look critically about you, to make informed decisions and individual com-

mitments. In exploring this independence you will want a college that offers you every opportunity to find your own way—and kind—of life. Elizabethtown offers you this opportunity.

A pleasant environment

The grounds of the College are quietly conducive to life in and out of the classroom. If there are formal aspects of the college landscape—terraced playing fields, wide lawns, a lovely dell which rises to groves of trees among which sit many of the College's academic buildings, there are also places where one can quietly wander alone—along the small pond where students often read, fish, and doze in the warmer months (and skate in the winter), or out into the countryside which surrounds the town.

For the countryside is beautiful. To the east, Lancaster County is a region of well-kept and remarkably fertile farmland, while nearby to the west of the College rise the Appalachian mountains, where students often hike in the spring and autumn, and ski in the winter. The Borough of Elizabethtown itself is very small—some 8,000 people—and, naturally, offers many points of contrast, pro and con, to larger cities. Fortunately however, you do not have to choose. On the one hand you can enjoy the attractive qualities of life in a small town—a fairly relaxed pace of life, a quietly cordial atmosphere, the ready accessibility of all areas of town to the College ("downtown" is an easy walk of several blocks). On the other hand, Hershey, a resort and recreational center popular with students, is just 15 minutes from campus, and the cities of Lancaster, Harrisburg, and York are all 30 minutes away.

Within this area cultural resources are ample, if naturally less varied and rich than a big city might afford. The College supports a good calendar of cultural events—concerts, recitals, lectures, movie series. Harrisburg and Hershey each support symphony orchestras, and in the summer there is a very fine music and drama festival in Mount Gretna, a few miles to the north. Lancaster is quite properly proud of its Fulton Opera House, a richly restored 19th-century theater which offers a wide array of



cultural events in dance, drama, and music. Further afield, Philadelphia and Baltimore are within an hour and a half of the campus, New York and Washington within three. In short, you are by no means isolated at Elizabethtown.

A chance to express yourself

Elizabethtown not only offers you the chance to enjoy cultural offerings both on and off the campus, it also gives you ample opportunity to discover, explore, and develop your own interests and abilities. You can involve yourself in a wide variety of activities, from acting in plays to directing them, from playing music to playing chess, in scuba diving, spelunking, fencing, and photography, and in many other student organizations in which your interests and talents can have full rein.

Many organizations and groups speak to more serious interests. You can join an organization that reinforces your academic program—like the Accounting Club, the Supreme Fiction Society, the local chapter of the American Chemical Society. A number of religious groups offer fellowship and worship in exploring corporate and individual spiritual concerns. In other organizations students give their time and energies in volunteer community service.

Name your interest, and in all probability there is a student organization that reflects it. If not, and if you can find enough like-minded students, the College encourages you to start a new group.

Another very important part of student life at Elizabethtown is the athletic program. The College is well equipped to serve most physical fitness programs. Students and faculty frequently use the gymnasium and the student center—swimming, bowling, jogging, playing tennis or handball or racquetball, working out in the weightroom, and so on. Whether you want to spend part of an afternoon shooting basketball with a few friends or follow your own schedule of physical conditioning, the College encourages you, firmly believing in the old maxim, *mens sana in corpore sano*—a healthy mind in a healthy body.

In addition to individual sports programs, the College fields men's varsity teams in baseball, basketball, soccer, tennis, and wrestling; women's varsity teams in basketball, field hockey, softball, tennis, and volleyball; and coed varsity cross-country and swimming teams. The College's intramural leagues—for men, women, and coed—give you a chance to compete against teams from other residence halls, from other clubs, and from the faculty in

flag football, soccer, volleyball, basketball, bowling, softball, paddleball, and tennis.

Helping and being helped

Volunteer work in the community is an important part of college life for many students. They help in a wide range of community services, from working in hospitals to fighting community fires with the volunteer fire company, from tutoring children with reading disabilities to assisting in local churches. This concern is one sure sign that students think of the Borough of Elizabethtown as *their* community, and want to make a personal commitment to it.

In turn, should you need help, the College stands ready to assist you. Your faculty adviser or, indeed, any member of the faculty can offer you academic counseling, from helping you plan your program of study to suggesting tutoring or remedial work, or advanced study. Should you decide to go on to graduate or professional school, members of the faculty will help you in the important process of graduate school selection and admissions.

If you have personal concerns, the Center for Counseling and Student Development is an excellent source of help. Another is the College chaplain, who offers spiritual counsel. If you would feel more at home with a member of your own faith, the chaplain will put you in touch with a local minister, priest, or rabbi.

For routine medical problems, the College maintains the College Health Center with a 24-hour nursing staff. A modern health center with X-ray and laboratory facilities is five minutes from campus, and in case of emergency or serious illness the Hershey Medical Center (the hospital and medical school of The Pennsylvania State University) is only 15 minutes away.

Full citizenship in the college community

As a member of the college community, you will enjoy more independence than you have probably ever had before. Not only will you be making important decisions about the direction of your own life, you will also share responsibility for the well-being of the larger academic community. At Elizabethtown students join the faculty and administration in both the privileges and the duties of citizenship in the College.

Most students live on campus in one of the residence communities—groups of two or three residence halls. You can become actively involved in the governance of your residence community, planning activities for all residents



to share, establishing rules that will protect individual rights and make the community a more pleasant place in which to live, and determining disciplinary measures for violations.

In the larger community, the College as a whole, you can be just as actively involved. Students play a major part in planning all-campus events—from the cultural series to rock concerts to benefit dance-a-thons. Instead of having "just another student government association," the College elects students to the Community Congress, the Residence Hall Council, the Campus Life Council, and other college-wide governance and policy-making committees. In short, at Elizabethtown you will have opportunities to test both your leadership skills and your organizational abilities, and to make your voice heard in deciding policies that will set the future course of the College.

Nor is your status as a full member of the academic community merely a matter of governmental organization. It is also reflected in a college social life in which faculty and students meet to enjoy shared interests. Professors join in student activities—not necessarily as leaders, but simply because they enjoy hiking or painting scenery. You in turn will join in faculty activities—not as a student, but as a friend and guest. Thus the old gulf between student and teacher narrows, bridged by a sense of shared commitment to an academic community in which all members join together to live and to learn.

A PLACE TO LEARN

Learning and living are synonymous—and nowhere is this clearer than in Elizabethtown's classrooms. A college education is an adventure in which you explore the frontiers of the universe, the inner workings of the human brain, the day-to-day lives of people who lived thousands of years ago, the fascinating symmetries (and similarities!) of mathematics and music, rat colonies and human crowds, the structure of the atom and the solar system. It is an education designed to open your mind to limitless possibilities, by giving you:

Individual attention

At Elizabethtown, education is not an assembly-line, mass-produced commodity, but a personal journey in which you seek answers to the needs, abilities, and interests that make you who you are. Just as independence in the college community accords both privileges and





responsibilities, so this kind of individual education encourages your maturity in the classroom. For if an individual education means that professors must know you well so that they can direct their teaching specifically to you, it also means that you must responsibly participate in your own education—for it is your journey.

Elizabethtown strives to provide an individual education by keeping its classes small and informal. The student faculty ratio is 14:1, and many classes are even smaller, especially in your junior and senior years. The College recognizes that learning comprises two fundamental tasks—the absorption of a given body of skills and factual information, and the ability of the mind flexibly and subtly to interpret this information, integrating it with the mind's own experience of itself and of the world. Accordingly, lectures and discussion groups encourage you to probe, analyze, to speak up, challenge others' opinions, and defend your own. Intelligent disagreement, both with fellow students and with the professor, both in class and afterwards, is always encouraged.

An exceptional faculty

Out of class discussions with professors are commonplace at Elizabethtown. The College's instructors have a commitment to helping you on a one-on-one basis, whether challenging you to do incisive independent study, inviting you to help in their own research, or seeing you through a rough spot in a course. Elizabethtown professors' interest in you is personal, and it does not end when the class bell rings—which is one of the reasons they were asked to teach at the College.

Of course, the faculty also possesses the recognized professional qualifications; most of them hold the highest earned degree in their fields, and many are doing research that will lead to the publication of books and scholarly articles. However, the College insists on going beyond formal credentials to find professors who can excite you about their subjects, who will value your contributions to the class as greatly as you value theirs, who can challenge you to become what you would be.

Modern facilities and equipment

Perhaps the point of greatest interest to a prospective student at Elizabethtown is the library. The library holdings comprise 155,000 bound volumes; over 850 periodicals; 7,000 art slides; 6,000 records, 450 tapes, and 2,800 musical scores; and more than 11,000 microforms.

The library features open stacks for research, large reading rooms, small study rooms, and individual study carrels. By virtue of membership in several library networks, the library has access to the resources of other libraries in the state, as well as in the United States.

The science departments have an impressive array of sophisticated equipment, some of which is usually found only at much larger institutions. Its software systems include all the major computer languages. Elizabethtown is one of the few colleges which offer its students additional systems such as a data management system, an simulation, statistical, and interactive graphics packages.

The College has television and radio studios; art studios and photography darkrooms; music practice rooms, practice instruments, and playback equipment facilities for plays and concerts.

Every academic facility on campus has been either renovated or built since 1957. Each department occupies a separate area or building. Classrooms, laboratories, studios, special library collections, faculty offices, and departmental lounges are grouped conveniently together with plenty of space for both faculty and student needs. Consequently, you and your professor can settle a point quickly because the references are close at hand, or you can set up complex laboratory experiments without worrying that other classes will disturb them.

A curriculum that meets your needs

During your first two years at Elizabethtown, you will concentrate on courses that fulfill the General Education Core requirement, a schedule of courses in literature, modern languages, the fine arts, religion and philosophy, history, social science, mathematics, science, and physical education. The resulting broad general knowledge of many fields is good in itself, for certainly no one can claim to be well-educated without it, and it also gives you a chance to sample a full range of academic disciplines before you decide on your major. If like many freshmen you are still undecided when you enter college, this aspect of the General Education requirement will be of real benefit to you.

When you are ready to concentrate on a major field of study, Elizabethtown gives you the following choices:



Liberal arts majors

Biology	Music
Chemistry	Physics
Communication Arts	Political Science
Economics	Psychology
English	Religion and
History	Philosophy
Mathematics	Sociology
Modern Languages	
French	
German	
Spanish	

Career-oriented majors:

Business	Allied Health
Accounting	Professions
Business	Medical
Administration	Technology
Chemical	Music Therapy
Management	Occupational
Computer Science	Therapy
Education	Associate degree:
Early Childhood	Medical
Elementary	Secretarial
Secondary	Science
Business	Social Work
Music	

Preprofessional programs:

Pre-law	Pre-veterinary
Pre-medicine	medicine
Pre-dentistry	Pre-seminary
Pre-osteopathy	

To supplement and complement your studies, the College offers a variety of non-major courses in:

Art	Physical Education
Earth Science	and Health
Geography	

Cooperative programs

In addition, there are cooperative programs with other colleges and universities in:

Engineering (Three years at Elizabethtown and two years at Pennsylvania State University resulting in two degrees);

Forestry (Three years at Elizabethtown and two years at Duke University, resulting in a bachelor's degree from Elizabethtown and a master's degree from Duke).

Pre-nursing (Two years at Elizabethtown and two years at Georgetown University, resulting in a bachelor of science degree from Georgetown.)

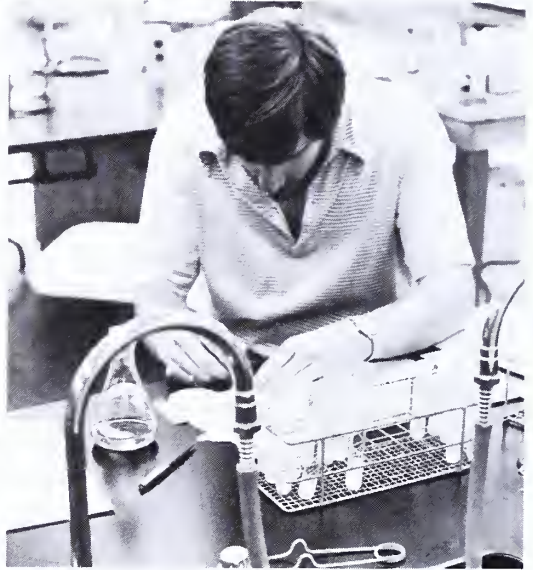


Special academic options

Once you have begun intensive study in your major field, you may well find yourself so interested in some aspect of it that you want to explore it more fully than regular coursework allows. Through *independent study*, you can pursue a project of your own for a semester or a year, researching it and writing a professional paper under the guidance of your faculty adviser. Independent study is especially worthwhile if you plan to go on to graduate school because it refines your skills in the research methodology required in graduate studies.

Another academic option, *directed study*, allows you to take a regular course during a semester in which it is not offered to the student body as a whole. Because the professor who teaches the course will instruct you individually, you are in effect a class of one. This option can be helpful if you have a tight schedule and find it difficult to take a course that you need or want when it is normally offered.

One popular option is *study abroad*, whereby you may spend a year studying in England, France, Germany, Spain, Africa, or Mexico. You need not be a language major to qualify for foreign study; students have gone abroad to study political science, educational systems, social service organizations, music, and so on.



A PLACE TO LAUNCH A CAREER

One of the main reasons why you have decided to go to college is to prepare yourself for a career ... even if you are not yet sure exactly what that career will be. This concern is natural and important, and you have every right to expect that the college you select will treat career planning and preparation as seriously as you do. At Elizabethtown we agree, and we offer:

An invaluable liberal arts background

The General Education curriculum not only helps you to choose a career, it also seeks to provide you with the breadth and flexibility to change careers as the times change.

A narrow vocational education may qualify you for a specific entry-level position, but it does not provide what you need to move beyond that point. When companies consider you for promotion into positions of responsibility, they do not look for technical skill; instead they look for your ability to reason objectively, to solve problems, organize, and communicate effec-



tively: which is to say, your ability to think. These are precisely the qualities that a broad intellectual training in the liberal arts will give you.

For careers change. A century ago carriage makers and railroad telegraphers were in great demand; today their skills are almost useless. The acceleration of technology means that the market for specific job skills changes at an ever faster pace, and it certainly makes little sense to spend all your college years preparing for a job that might become obsolete in a decade. It is estimated that today's college freshman will change *careers* (not jobs) five to seven times during his lifetime. Your program of study should anticipate *all* of those careers, not just the first one. A general liberal arts education will enable you to keep pace with change because it trains your mind to be flexible and to grasp new concepts.

People change, too. As you grow older, you may find that your interests take new directions; work which once challenged and fascinated you may come to seem like a straitjacket. Such growth is healthy and desirable, but it may be frustrating if you do not have the intellectual ability to discover and move towards a new and more fulfilling career.

Learning by experience

You should not, of course, neglect to prepare for your first career. Here, one of the finest learning processes is actual experience in your prospective field of work. Although classroom projects in many courses are based on situations you will meet on the job after graduation, the College can also offer you a more direct experience by placing you in work situations as part of your studies.

Field studies may involve work experience or observation—or a combination of the two. For example, in social work, the Urban Seminar will take you into a major metropolitan area where, for three weeks, you will undertake an on-site study of urban social problems as part of an evaluative comparison between urban and small town social welfare situations. In religion and philosophy, you may visit the major religious centers of the Eastern Seaboard to gain first-hand acquaintance with people who follow Hinduism, Buddhism, Taoism, Shinto, and other religions which are not common in this country. In economics, field trips to major financial centers enable you to see the applications of your studies in the workaday world.

Practicums and internships enable students to gain practical experience through working



under the close supervision of a professional in the field. In the past, accounting students worked with auditing firms; communication arts majors have taken jobs with radio or TV stations, or on newspapers like the Harrisburg *Patriot-News*; chemistry majors have worked in gas chromatography with the Mobil Oil Company. Internships run from several weeks to a semester or a summer. When work interns return to campus they write a detailed paper on what they have gained from the experience. Students earn academic credit for a practicum or internship; however, few of these experiences provide a salary.

Learning by experience can help you decide whether you are ready to make a commitment to a specific career. You might find that the job or the field is not for you, after all. However, that discovery is also valuable; because you are still in college, you have time to alter your career direction.

Career counseling and placement

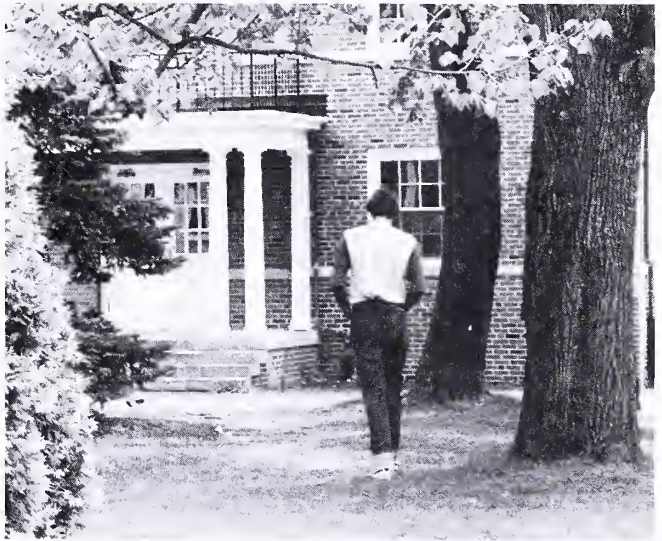
As you begin to consider career options you will find that the College offers three very useful kinds of resources: your professors, the Center for Counseling and Student Development, and the Career Development Center. As you get to know your professors, you will find that many of them have had substantial work experience beyond the teaching profession, and that all of them are knowledgeable about the career and professional opportunities in their



academic fields. At any time in your college life, they will be happy to sit down with you to discuss your career possibilities. The Center for Counseling and Student Development can also assist you in aligning your interests and abilities with your educational goals as you go about choosing a major.

To supplement and complement the counsel of professors, the College maintains a Career Planning Office which will help you explore career options and settle on the right career for you. A sizable library of career publications provides the latest information about specific careers—everything from the projected number of job openings in a specific field to surveys of salaries at the entry level.

When you begin to think about your first job (probably long before your senior year), that will likely mean some visits to the Placement Office, where the Director not only maintains a list of current job openings and potential employers, but also provides counsel in writing resumes and effective methods to be used in job interviews. The process is successful: An average of over 90 percent of each graduating class from 1977–1982 have been either employed or engaged in full-time graduate or professional study within four months of graduation. (Incidentally, the Placement Office also will help you if you are looking for off-campus, part-time, and summer jobs, and the services of this office are open to alumni long after they have graduated from Elizabethtown.)



ENTERING ELIZABETHTOWN

If Elizabethtown sounds like your kind of college, your next question is whether you will be accepted for admission. Although that question cannot be answered fully until the Admissions Office sees your application form and high school transcript, you can arrive at a general idea of your chances. The College's admissions policies are both competitive and selective, requiring:

- Completion of a college preparatory program in an accredited high school with standing in the upper half of your class.
- A recommendation from your high school principal, your guidance counselor, or both, attesting to your academic ability and your character.
- Scores on the Scholastic Aptitude Test.

\$3942.50 per semester for resident students, \$2697.50 per semester for commuters. The College does, however, maintain an extensive financial aid program, with over 80 percent of the students receiving some form of assistance, usually in a package that combines grants, scholarships, loans, and on-campus jobs. If you think you will need financial help, the Office of Financial Aid would be happy to talk to you about it.

A catalog can give you some idea of what a college is like, but the best way to make your decision is to visit Elizabethtown. The Admissions Office will arrange a visit that matches your interests: sitting in on particular classes, talking informally with students, getting financial aid information, looking at the special equipment you will be working with in a year or two. The College welcomes the opportunity to become mutually acquainted.

No quality college education is inexpensive; in 1983-84 cost for tuition, room, and board is

ELIZABETHTOWN COLLEGE AT A GLANCE

The College: Elizabethtown is a four-year, co-educational college associated with the Church of the Brethren, offering a liberal arts education as well as preparation for specific careers. The College is located in Elizabethtown, a residential community in south central Pennsylvania, midway between Harrisburg and Lancaster.

Campus: The campus comprises 110 acres and 15 major buildings, all of which are new or renovated since 1957. New chemistry building to be completed by Dec. 1983. Renovations for a major communication arts center to begin Jan. 1984.

Students: There are about 1400 students, of which 1200 are resident students representing about 18 states and twelve foreign countries.

Accreditation: Elizabethtown is fully accredited by the Middle States Association of Colleges and Secondary Schools as well as by many professional associations.

Degrees Offered: The College offers the Bachelor of Arts, Bachelor of Science, Bachelor of Liberal Arts, Bachelor of Professional Studies, Associate of Arts, and Associate of Science degrees.

Fields of Study: A complete list of majors is provided on page 33 of this catalog.

Academic Options: Elizabethtown offers such optional academic opportunities as independent study and research, tutorials, directed study, field studies or internships in most departments, study abroad programs.

Faculty: The full-time faculty consists of 100 members, providing a student-faculty ratio of 14 to 1.

Library: The library has 155,000 bound volumes in open stacks, 850 periodicals, a large reading room, small study rooms, a music listening room, and collections of musical recordings, art slides, microforms.

Residence Halls: Diverse living arrangements are available within the six residence halls, which are equipped with lounges, color TVs, pianos, ping pong tables, vending machines, washers and dryers, kitchen facilities.

Student Clubs and Activities: Elizabethtown offers a wide range of different student activities, covering a range of academic, musical, dramatic, communications, and special interest opportunities. There is a strong, active student government.

Cultural and Recreational Activities: The College maintains a cultural program which

brings to campus nationally known speakers, musical and theatrical groups, solo performers. The hub of recreational activities is the Baugher Student Center, which provides a swimming pool and bowling lanes as well as other recreational facilities. The proximity of the College to metropolitan centers of the Eastern Seaboard also makes countless cultural and recreational activities available.

Religious Life: Attendance is not required, but students of various faiths are encouraged to participate in on-campus and off-campus religious services.

Student Counseling Services: As needed, students are urged to take advantage of academic counseling, personal counseling, remedial academic and tutorial assistance, career counseling, job placement, graduate and professional school advisement, medical services.

Athletics: Elizabethtown fields NCAA intercollegiate teams for men in baseball, basketball, soccer, swimming, tennis, coed cross-country, and wrestling. It fields NCAA women's teams in basketball, field hockey, softball, swimming, tennis, volleyball, and coed cross-country. In addition, throughout the year there is an active intramural program for all students.

Costs: The 1983-1984 comprehensive fee (including tuition, room, board) is \$3942.50 per semester for resident students. The fee for commuters (which does not include room and board) is \$2697.50 per semester. Additional costs include books (about \$300 a year), personal expenses, personal transportation.

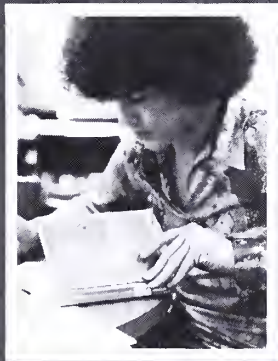
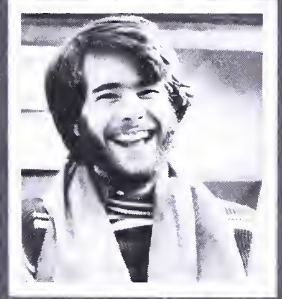
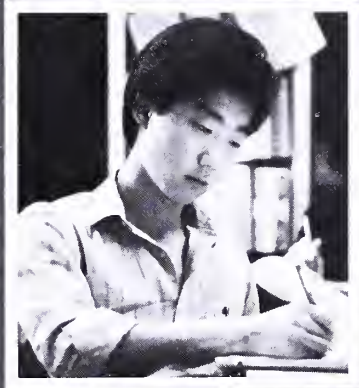
Financial Aid: The College offers a package of aid consisting of scholarship, grants, loans, and student employment. About 80 percent of all students receive some form of financial aid through the College.

Admission Plans: Elizabethtown offers a rolling admission plan, with each application considered as it is received. For outstanding high school juniors, there is an Early Admissions Plan. Qualified students who have attended a regionally accredited two-year or four-year institution with at least a 2.0 average may apply for transfer to Elizabethtown.

Admissions Fees: There is a non-returnable \$15 fee which must accompany the application for admission. On acceptance, there is a \$100 acceptance fee, which is applied to the first year's tuition.

Campus Visit: Although a campus visit is not mandatory, it is strongly recommended.

Admissions



Admissions

ENTERING THE COLLEGE

Elizabethtown College seeks serious students who intend to apply themselves to the educational process. Interested students are urged to look closely at the College's varied academic offerings, its educational philosophy, and its physical facilities. Visits to campus are encouraged and may be arranged through the Office of Admissions.

The College reserves the right to admit students on a selective basis in order to maintain departments and majors of an effective size. Students are admitted without reference to race, color, creed, sex, or national origin. Students may be admitted under four admissions plans: regular, early, transfer, and special.

Regular Admissions Plan

Young men and women who are high school graduates and whose records indicate serious scholarship, good character, and satisfactory health are encouraged to apply for admission to Elizabethtown College. They should communicate with the Director of Admissions to obtain the proper application forms and any detailed information which may be required. The College evaluates applications using the following guidelines:

1. The student must be a graduate of a senior high school accredited by the regional accrediting agency or by the Department of Education of the state in which he lives.
2. The student's high school principal or guidance counselor must recommend admission both in regard to academic ability and to character.
3. The student must have completed the College Preparatory curriculum in his high school. However, the College may admit a student who has not completed such a course of study, but whom it deems qualified for entrance on the basis of test scores or other means of evaluation.
4. The student must take the Scholastic Aptitude Test administered by the College Entrance Examination Board (Box 592, Princeton, New Jersey 68540).
5. The student should visit the College for an on-campus interview. (While optional, an interview is strongly recommended.)

6. On being admitted to the College, the student shall file a physician's statement on a form provided by the College.

Advanced Placement Program (CEEB):

Elizabethtown College participates in the Advanced Placement Program of the College Entrance Examination Board. With the approval of the department concerned, the College may grant advanced placement and credit to students who perform satisfactorily on the Advanced Placement Examination.

Early Admissions Plan

To enable superior high school students to move more quickly into their higher education, Elizabethtown College will allow carefully selected students to begin their college work immediately after completing the junior year in high school. Students enrolled under this program enter the College as regular freshmen; upon successful completion of the freshman year, they are granted a high school diploma in addition to the college credits earned. This program has the full cooperation and support of the Pennsylvania Department of Education.

All degree programs at the College are available to these selected students, who are expected to exhibit the mental and emotional maturity necessary to adjust to the general program of the College. Following enrollment, students receive close academic guidance by selected faculty members.

All applicants for the accelerated admissions program are carefully screened on a highly individualized basis. In addition to the fundamental requirement that students must have completed their eleventh year in an accredited high school program, the College gives acute attention to the following factors: mental ability, scholastic achievement, social and physical maturity, and personal motivation.

1. Students must rank in the upper percentiles of their high school class; furthermore, their performance on the Scholastic Aptitude Test is given weighty consideration.
2. The College accords great importance to the opinions and predictions of the student's high school principal and guidance counselor, and to those of the College's department chairman in the student's prospective major.
3. The written approval of the student's parents, high school principal, and guidance counselor is mandatory before the student can be accepted. In addition to the indicated statistical data, the selection process

includes a conference with the student and the Director of Admissions.

Any student interested in applying for this accelerated program should first discuss the matter thoroughly with the high school guidance counselor and then write to the Director of Admissions at Elizabethtown College for an application form.

Transfer Admissions Plan

Elizabethtown College welcomes students who have been enrolled at two-year or four-year colleges. To be fully matriculated, transfer students must provide evidence of good social and academic standing from the previous college.

Students, who, at the time of matriculation, are graduates of a degree granting, two-year college accredited by one of the six regional accrediting agencies will receive advanced standing. All students who transfer from regionally accredited two-year colleges may transfer a maximum of 64 hours of credit to Elizabethtown College and will be required to earn a minimum of 64 additional semester hours in order to graduate from the College.

Students who transfer from an accredited two-year college without an associate degree may transfer a maximum of 64 hours of credit to Elizabethtown College. When the total number of transfer credits and credits earned at Elizabethtown College exceeds 59, placing the student in junior status, the student is not permitted to transfer additional credits from a junior college.

Students who have attended four-year colleges or universities accredited by one of the six regional accrediting agencies will be permitted to transfer previous academic credit; however, in order to meet graduation requirements, the student must earn a minimum of 30 semester hours credit in classes on the Elizabethtown College campus. These 30 credits must be included within the most recent 60 credits, and a minimum of 15 of the 30 credits must be in the major department. At least 8 of these 15 must be on the upper level (normally 300- or 400-level).

College courses which carry a grade of C or P or better from other regionally accredited institutions, and which are acceptable toward a degree at Elizabethtown College may be transferred upon the approval of the Registrar. Credit will be granted for those courses that satisfy the student's major or general education Core requirements at the College. Other courses will be considered for elective credit. In any doubtful situations, the Registrar will

consult the department chairman or the Dean of the Faculty. Grades are not transferrable; courses and credits, however, may be transferred.

In addition to the six guidelines listed under the Regular Admission Plan, the prospective transfer student will need to present an official transcript indicating work completed at, and honorable dismissal from all colleges attended. The College will request recommendations from the dean of the college last attended. Students from non-accredited institutions should see the special admissions plan described below.

Special Admissions Plans

The College offers provisional special admissions under the following two programs. In each program, as many as possible of the principles listed under the Regular Admissions Plan will be followed.

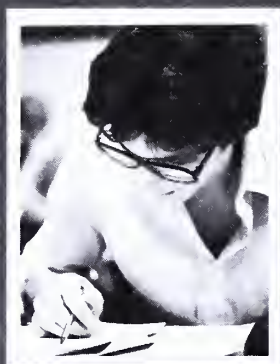
Transfer students from non-accredited colleges:

Students who have attended a non-accredited institution may wish to enroll at Elizabethtown. In cases in which the record is above average, the College may allow a student to validate this non-accredited work by passing more advanced courses at Elizabethtown. In such cases, Elizabethtown reserves the right to revise the evaluation after the equivalent of one semester's work at Elizabethtown College. Full admission may be granted after completion of 15 hours of work with grades of C or better. Such students may also validate credit by passing the College Level Examination Program Tests upon the approval of the department concerned and the Dean of the Faculty. The validation of prior learning through testing is limited to a maximum of 64 semester hours.

Continuing education for older adults:

In some instances adults who may be deficient in some of the college entrance requirements wish to enroll in college study. In those cases in which successful work and other pursuits indicate basic academic aptitudes and achievements, a person may be admitted as a special student on a provisional basis. In such cases full admission may be granted after the completion of 15 hours of college study with grades of C or better. The validation of prior learning through testing is limited to a maximum of 64 semester hours. Such credits are considered as transfer credits for purposes of establishing residency. Individuals interested in continuing education will wish to consult the program description on page 41 of this catalog, as well as the Center for Continuing Education itself in Nicarry Hall.

Cost and Financial Aid



Financial Information

Annual Expenses

The expenses for the year are covered by a comprehensive fee, which for resident students includes tuition (12–18 credit hours), class dues, a furnished room, and board (the cafeteria closes after the noon meal on the day on which the College recesses for vacation, holiday, or semester break, and reopens for the evening meal the day before classes resume); use of the library, the student center, the gymnasium and athletic fields; admission to all athletic games on the campus, and to community cultural programs; subscription to *The Etow-nian*, limited use of the Infirmary (resident students only).

Detailed costs for Elizabethtown College may be found in the pamphlet, "Annual Expenses," available from the Business Office. Costs for the 1983–84 academic year follow: resident student, \$7,885; commuter student, \$5,395.

All charges are payable prior to registration each term. Credit allowed for College scholarships, grants-in-aid, matriculation or pre-registration deposits will be deducted from the invoice. To be eligible for college aid, a student must be enrolled full-time.

Absences and Sickness

A student who is absent from the College because of sickness, or for any other reason, and who retains his place in class, pays in full during his absence.

Withdrawal

Full-time students give their notice of withdrawal in writing to the Center for counseling and Student Development; part-time students, to the Registrar's office. If withdrawal occurs within the three weeks prior to the date of registration in either semester, a resident student is liable for a \$150.00 room penalty in addition to the pre-registration or matriculation deposit. The room penalty when paid will be credited to the student's account should the student return to the College in a later semester as a resident student. If a student withdraws, changes credit hours, and/or room and board status after the beginning of the semester, the student is obligated for a full semester's room charge and

actual board used to the date of withdrawal, plus 25 percent of the unused board. Tuition charges will be refunded on the following basis:

First week	75%
Second through Third weeks	50%
Fourth week	25%
Beginning of the Fifth week	00%

The effective date for calculating the above refunds will be the date of receipt of a written notice of voluntary withdrawal in the Center for counseling and Student Development Center. Failure to give notice of withdrawal will result in an unofficial withdrawal. Refunds, transcripts, and recommendations will be withheld by the College until an official withdrawal has been obtained. Refunds for a withdrawal due to medical reasons or when a student is suspended or dismissed from College will be prorated to the date of the withdrawal. All refunds will be paid within thirty days of graduation or withdrawal. Refunds for currently enrolled students must be requested in writing. (Registration counts as the beginning of college).

Change of Status

The above withdrawal policy is also in force when a student changes credit hours, or room and board status, or both.

General Expenses

An *application fee* of \$15.00 must accompany the application for admission. This fee covers the cost of processing the prospective student's application, is non-refundable, and cannot be applied toward the payment of other charges.

An applicant should send the Director of Admissions, Elizabethtown College, a *matriculation deposit* of \$100.00 within 30 days after receiving a letter of acceptance. This amount will be applied to the applicant's account as a credit on the first tuition billing. The deposit is not refundable except that \$50.00 will be returned in event of withdrawal prior to February 15. If an applicant intends to postpone the decision until the financial aid package is received, the matriculation deposit will be due 30 days from the date of the receipt of the aid package.

During the spring semester, a *pre-registration deposit* in the amount of \$100.00 is required of all current students who plan to return to college in the fall. This deposit must be paid before a student will be permitted to pre-register for the fall semester. The \$100.00 deposit will be applied only as a credit on the fall semester billing, and is not refundable.

Cap, gown, and hood rental is paid upon placing an order at the bookstore.

Two transcripts of record will be provided free of charge to students in regular attendance and of freshmen, sophomore, or junior status. Seniors may have a maximum of ten transcripts of record free of charge when applying to graduate/professional schools or for employment. Two copies of the final record are also available free to each student after graduation. A charge of \$2.00 per copy will be made for all other transcripts. No transcripts of record are furnished to anyone whose account is not paid in full.

Checks should be made payable to Elizabeth-town College.

Tuition and Fees for Medical Technology Students

There is an administrative charge of ten per cent of the College's tuition fees to the medical technology students entering their clinical year. In addition these students will pay the hospital any charges directly related to the year of study.

Off-campus Placement

Students may be required to pay any fees charged by agencies or clinical facilities for student placement in programs such as occupational therapy, medical technology, music therapy, education, and so forth, where placement is required by professional accrediting association, the joint program, or other program imperatives.

Financial Aid Policies and Programs

STUDENT AS CONSUMER

The U. S. Office of Education, in section 493A of the Higher Education Act as amended in 1976, requires post-secondary educational institutions to disseminate relevant, candid information on a variety of topics to prospective and enrolled students who request it. As education consumers, students should have available full, up-to-date information in order to make wise decisions about their educational futures.

POLICIES

The Student Financial Aid Program at Elizabethtown College operates in harmony with the principles of student financial aid administration developed by the College Scholarship Service Assembly of the College Entrance Examination Board. The primary goal is to help meet the financial need of students to enable them to secure a college education. Consequently, the number of no-need awards (awards based exclusively on factors other than financial need), is controlled in order to permit a majority of college funds to be used to meet financial need.

1. Elizabethtown College is committed to assuring equal opportunity to all persons regardless of race, religion, ancestry, color, national origin, sex, or handicap. This policy extends to employment, admission to the College, and consideration for student financial aids, and is in compliance with all federal laws, including Title IX of the Education Amendments of 1972.
2. Each applicant for financial aid must be accepted by Elizabethtown College and must have submitted an Elizabethtown College Application for Student Financial Aid, as well as a Financial Aid Form available from high school counselors or the Financial Aid Office. The filing deadline at Elizabethtown College is April 1. If a student applies only for no-need grants, a Fi-

ancial Aid Form is not necessary; however, the application must be received by the Financial Aid Office by March 1.

3. Late applications will be considered only if necessary funds are available.
4. The amount of financial aid granted to any student is based upon the extent of his financial need (defined as the difference between the total expenses of attending college and the total financial resources available to meet this expense) and the availability of necessary funds. The College considers financial aid to be a partnership shared by the student, parents, and College.
5. The College will determine which programs of available financial aid best satisfy the need of the individual students. An award may be single, or a combination of several forms of financial aid. Usually the package is made up from a combination of three elements: grants, loans, and work.

Note: A student has 30 days from the time he receives notice of a financial award either to accept or reject the College's offer.

6. Students may lose financial aid by failing to maintain satisfactory academic progress in accordance with the standards outlined in the college catalog.
7. Students must re-apply each year for all financial aid. No aid is automatically renewed.
8. Students' financial aid may change from year to year with changes in their financial status and in the availability of funds.
9. *Refund Policy:* Students who withdraw from the College after the beginning of the semester are obligated to pay the full semester's room charges; the actual board used to the date of withdrawal, plus 25 percent of the unused board. Tuition charges will be refunded on the following basis (the first day of registration counts as the beginning of college):

First week	75%
Second through third week	50%
Fourth week	25%
Beginning of fifth week	00%
10. Parents have a legal and moral responsibility to provide a reasonable amount of fi-

financial assistance toward a student's college expenses. The fact that a student desires to be financially independent does not release parents from this responsibility.

11. Financial aid applicants who have previously attended another post—secondary school, college, or university must submit to the Financial Aid Office an official Financial Aid Transcript to document their financial aid record at all previous institutions.
12. The College holds in strictest confidence all financial information which it receives, and it considers any award to be a confidential matter between the College, the applicant, and the applicant's family. The College does not release information about individual awards and considers it inappropriate for aid recipients to do so.
13. All awards will be made for one academic year and will be divided equally between the two semesters.
14. Elizabethtown College reserves the right to make changes in the amount and type of a student's financial aid at any time during a year in which either the student receives additional unanticipated assistance from an outside source, or the College receives information about current family income which varies from the income reported on the Financial Aid Form. Such changes are not only made to protect the equity of financial aid awards, they are also usually mandated by federal program requirements on aid eligibility.
15. No student may receive more than eight semesters of institutional financial assistance; the College will not award aid to students who already possess a bachelor's degree.
16. A student must be enrolled on a full-time basis to be eligible for most institutional assistance.
17. Withdrawal from Elizabethtown College terminates any aid commitment by the College.
18. Foreign students wishing to study at Elizabethtown College need to show legal documentation that adequate financial resources are available to them before the Financial Aid Director will release the I-20 (student visa) Form.

19. A student receiving employee tuition benefits is ineligible for any other college-administered gift aid unless the student shows financial need or receives an academic scholarship.

Note: Data describing student retention, accrediting agency credentials, and the College's accreditation status may be obtained from the offices of the Dean of the Faculty and the Dean of Student Affairs.

STATEMENT ON SATISFACTORY PROGRESS

The Higher Education Act of 1965 as amended by Congress in 1980 mandates institutions of higher education to establish minimum standards of satisfactory progress for students receiving financial aid. In order to comply with these Amendments, Elizabethtown College has established the following definition or standard of satisfactory progress for its students:

A full-time student (12–18 credits per semester) must have successfully completed 24 semester hours of academic work in the two preceding semesters (summer academic work, where applicable, may be included) in order to be eligible to continue Federal, State, and institutional financial assistance.*

A three-quarter time student (9–11 credits per semester) must have successfully completed 18 semester hours of academic work in the two preceding semesters (summer academic work, where applicable, may be included) in order to be eligible to continue Federal, State, and institutional financial assistance.*

A half-time student (6–8 credits per semester) must have successfully completed 12 semester hours of academic work in the two preceding semesters (summer academic work, where applicable, may be included) in order to be eligible to continue Federal, State, and institutional financial assistance.*

It is expected that a full-time student should complete all degree requirements within 10 semesters which is considered to be a reasonable length of time. *Special Note:* It takes 128 credits to obtain a Bachelor's Degree. To graduate in four years, a student must enroll for an average of 16 credits per semester. Enrolling for 12 credits (minimum for full-time) would extend graduation one year. There are some financial aid programs with 8 semester limits making financing of the last year more difficult.

The Financial Aid Office will notify by letter any student receiving financial assistance who does not meet minimum satisfactory progress and is being terminated from aid. The notice will be addressed to the student's current address. It shall be the responsibility of the student to inform the College of a correct mailing address at all times.

If financial aid is denied based upon the above standards of satisfactory progress, the student does have the right to appeal in writing first to the Director of Financial Aid and secondly to the Admissions, Academic Awards, and Financial Aid Committee. If the appeal is accepted, the financial aid in question will be restored to the student. If the appeal is denied, a student can be considered for financial aid only when credits have been completed to make up any credits short of normal satisfactory progress for all the semesters a student was on aid.

This evaluation of a student's academic standing and progress to determine Federal, State, and institutional financial aid will be made once a year or after two semesters of academic work.

*Course incompletions, withdrawals, repetitions, and noncredit remedial courses will not be counted.

PROGRAMS

Scholarships

Elizabethtown College Presidential Scholarships

Six competitive scholarships are awarded annually to academically superior entering freshmen. Each award amounts to \$2,000 per academic year; financial need is not a factor considered in the selection process.

Applicants must rank in the top five percent of their secondary school class at the time they apply and must have achieved a combined Scholastic Aptitude Test score of at least 1100 on the College Entrance Examination Board test. In addition, applicants must plan to be enrolled full-time (12 credit hours or more) and display good academic promise, achievement, and citizenship; recipients of the scholarship must maintain these requirements to be eligible for scholarship renewal.

Elizabethtown College Academic Scholarships

These competitive scholarships are based on the academic record of the student, and range from \$200 to \$1,500. Students must rank in the

upper ten percent of their high school class and have a minimum combination score of at least 1000 in the College Entrance Examination Board Tests or a composite score of 22 in the ACT test. Transfer students may also apply for this scholarship. They will be evaluated on the basis of their high school records, College Entrance Examination Board or ACT scores, and their records at their previous institution of higher education. Because these scholarships are awarded on a competitive basis, students do not automatically receive a scholarship if they meet the minimum requirements.

Elizabethtown College Dean's Privilege Scholarships

A student who has a cumulative quality point ratio of at least 3.50 at the end of his sophomore year at Elizabethtown College is eligible to apply for this scholarship. Eight \$500 awards are given annually. Students already receiving an academic scholarship of equal or greater value are not eligible.

Other Scholarship Programs

The Ruth Eshelman Althouse Scholarship was established to provide scholarship aid to an outstanding full-time student who has completed two years of study at Elizabethtown College, and who anticipates a career in elementary or secondary education.

The A. Warren Angstadt Tennis Scholarship was established to provide scholarship aid to two students in good academic standing who demonstrate financial need, display acceptable campus citizenship, and who play well in intercollegiate tennis.

The Flavia Martz Baugher Memorial Teaching Fund was established to provide scholarship aid to two senior students—one in elementary and one in secondary education—who manifest overall promise as an outstanding teacher.

The Brethren Health Education Foundation Scholarship is awarded annually by the Brethren Health Education Foundation based upon academic record, college activities, and financial need.

The Black Scholarship Fund was established to provide scholarship aid for black students who would otherwise not be able to matriculate at Elizabethtown College because of financial need.

The Erna and Dorsey Blecher Scholarship was established to provide scholarship aid to a student enrolled at the College.

The Grace C. Blough Music Scholarship Fund was established to provide scholarship

aid to a student who excels in musical aptitude and performance, academic achievement, and personal character, and who exhibits financial need.

The Thomas C. Conover Memorial Scholarship was established to provide scholarship aid to a full-time upperclass biology major who exhibits excellence in academic achievement, scientific attitude, and personal character.

The Amos K. Curry Memorial Fund was established to provide scholarship aid to students desiring to enter full-time Christian service.

The Robert S. Doherty Scholarship was established to provide scholarship aid to a student demonstrating scholastic ability, excellent athletic performance, and potential in track or cross-country athletics, who exhibits financial need and is possessed of good personal character.

The Mary G. Emenheiser Music Scholarship was established to provide scholarship aid for the development of musically talented students at Elizabethtown College.

The Herman G. Enterline Scholarship was established to provide scholarship aid to a student enrolled in the business program (when-ever possible a future teacher), who exhibits academic excellence in that field.

The Ernst / Whinney Alumni Endowment Fund was established to provide scholarship aid to an outstanding incoming freshman majoring in accounting.

The Eby C. Espenshade Scholarship was established to provide scholarship aid to any student enrolled at the College who exhibits financial need and who possesses the ability to excel in his college studies.

The Elmer Espenshade Scholarship Fund was established to provide scholarship aid to students from Lancaster County who exhibit financial need, academic ability, leadership potential, and who actively participate in campus activities.

The Fund for the Advancement of Ethnic Understanding was established by the Bucher families to foster the cause of underprivileged ethnic minorities in the form of scholarship aid or program aid.

The Future Business Leaders of America Scholarship is awarded by the FBLA to a freshman, based upon the student's demonstrated involvement in FBLA in high school and an above-average academic record.

The Bucher Scholarship was established to provide scholarship aid to a student enrolled at

Elizabethtown who is a member of the congregation at the Gettysburg Church of the Brethren.

The Greyhound Corporation Scholarship for Black Students is made available annually from the Greyhound Corporation to an incoming freshman who exhibits financial need.

The Hamilton Bank Work Scholarship Program is presented annually to a freshman student planning to pursue a career in business, who resides in the Harrisburg area. The student must be employed by Hamilton Bank during the summers, must demonstrate financial need, and must maintain a minimum 2.0 GPA.

The Howard W. and Margie F. Henry Scholarship Fund was established to provide aid to a student who is (in preferential sequence): a pre-ministerial student with evangelical orientation; a student preparing for foreign or home mission service; a student majoring in music; or a student majoring in a pre-nursing program. The recipient should be from Franklin County.

The Huth Engineers Scholarship was established to provide scholarship aid to a freshman student with need from Lancaster County who exhibits academic potential and extra-curricular involvement.

The Elizabethtown Kiwanis Golden Anniversary Scholarship was established by Elizabethtown College with the Elizabethtown Kiwanis to provide scholarship aid to a full-time student who has graduated from Elizabethtown Area High School or who is a bona fide resident of the school district, based upon academic ability, citizenship, and financial need.

The Edgar Leer Ministerial Scholarship was established to provide scholarship aid for a worthy student preparing for the ministry.

The Emma G. Musselman Foundation Business Scholarship was established to provide scholarship aid to a student who has completed four full-time semesters at the College and a minimum of 12 semester hours of business courses, who demonstrates academic excellence and excellent personal character. The scholarship provides the student who continues excellent work with aid in both the junior and senior years.

The Benjamin G. and Vera B. Musser Pre-Medical Scholarship was established to provide scholarship aid to an upperclass student who evidences a sincere desire to pursue a career in the medical profession, and who is chosen on the basis of academic performance, financial need, and faculty letters of recommendation.

The Purchasing Management Association Scholarship is made available by this Association to provide scholarship aid to a senior majoring in either business administration, economics, or accounting, based upon his academic achievement.

The R. Kent Replogle Scholarship was established to provide scholarship aid to a worthy senior who demonstrates financial need, who has achieved a GPA of 2.75 over-all and at least 3.00 in his major field of study, and who has won at least two varsity letters in inter-collegiate athletic competition for Elizabethtown College.

The Ressler Mill Foundation Scholarship Fund was established to provide scholarship aid to a full-time junior (for the senior year) majoring in occupational therapy, based upon academic achievement, scientific aptitude, personal character, and financial need.

The Levi B. Oaks Endowed Scholarship was established to provide scholarship aid in memory of Lucinda M. Mays to needy and worthy students attending Elizabethtown College.

The Glenn R. Patterson Scholarship was established by the H. B. Alexander Foundation in memory of a faithful employee to be awarded each year to an incoming student who demonstrates financial need and desires to pursue an education in the field of accounting.

The Charles Troxell Royer Memorial Scholarship was established to provide scholarship aid to a student preparing for service in the mission field.

The Mary Sachs Scholarship Fund was established to provide scholarship aid to one or more outstanding students preparing for a career in the field of business and exhibiting financial need.

The Andrew C. Schaedler Foundation Scholarship was established to provide scholarship aid to a worthy and needy student from central Pennsylvania who has graduated from a high school in Dauphin, Lebanon, Cumberland, York, Franklin, Lancaster, Perry, Juniata, Mifflin, Adams, Northumberland, or Huntingdon counties.

The John P. Shepherd, Jr. Athletic Scholarship was established to provide scholarship aid to a full-time upperclass student who shows excellence in academic achievement, athletic performance, and personal character.

The Harold E. Smith Company Occupational Therapy Scholarship was established to provide scholarship aid to a full-time sophomore (for the junior year) majoring in occupational

therapy, based upon academic achievement, scientific aptitude, personal character, and financial need.

The Sperry New Holland Scholarship was established to provide scholarship aid annually to three students, a sophomore, a junior and a senior, each majoring in the field of business, showing academic achievement, exceptional individual performance in extra-curricular activities, and financial need.

The Student Volunteer Missionary Scholarship was established to provide scholarship aid to students preparing for active missionary service.

The Victor F. Weaver, Inc. Scholarship Fund was established to provide scholarship aid to employees or the children of employees of this firm, who are enrolled on a full-time basis at Elizabethtown College, based upon scholastic achievement.

Grants

Pell (Basic Educational Opportunity) Grants

The Pell Grant is a federally funded gift assistance aid program. This program provides for aid to needy students based upon a formula unique to the program. Students desiring consideration must complete a Pell/Pennsylvania Higher Education Assistance Agency (PHEAA) composite application form and submit it to PHEAA, which will analyze the information submitted and advise the student of his "Student Aid Index." The student must then forward the Aid Report to the college aid officer who will determine within guidelines the value of the student's award and notify the students.

Supplemental Educational Opportunity Grants

Under the provisions of the Federal Higher Education Act of 1965 as amended in 1972, the College awards Supplemental Opportunity Grants to needy students. A student must be enrolled or accepted for enrollment on at least a half-time basis, must be capable of maintaining good academic standing, and have exceptional financial need. This grant is awarded on the basis of financial need as determined by the Financial Aid Form. The maximum annual award is \$500.

Pennsylvania Higher Education Assistance Agency (PHEAA) Grants

The PHEAA is responsible for the administration of the State Grant Program in Pennsylvania. Any Pennsylvania high school graduate who took the Scholastic Aptitude Test of the

College Entrance Examination Board or the American College Test of the American College Testing Service during the junior year will be sent a State Grant application during October of his senior year. Any student who did not as a junior take either of these two tests is responsible for securing an application from his high school guidance counselor during November of his senior year or from the PHEAA, Grant Division, Towne House, Harrisburg, Pennsylvania 17102. The deadline for submitting the application to PHEAA is May 1 if the student plans to attend a four-year institution like Elizabethtown College. The maximum annual award is \$1,500.

The guidelines for the program state that an applicant must be (1) a citizen of the United States or taking steps to become a citizen; (2) a resident of Pennsylvania for 12 months immediately prior to the date of application; (3) classified as a full-time student (i.e., taking at least 12 semester hours that will count toward graduation). The awards are based upon financial need rather than scholastic achievement, although a student must maintain progress toward a degree.

Students other than current high school seniors who did not have a State Grant for the prior year may secure an application from the Financial Aid Office at Elizabethtown or from the PHEAA in Harrisburg. The filing deadline for this category of applications will probably be May 1.

Students in other states should contact their high school guidance counselors for information about possible state scholarship programs. Applicants for financial aid from the College are expected to apply for state scholarship or grant aid where available.

Elizabethtown College Grants

Elizabethtown College Grants are available to students who demonstrate financial need by filing the Financial Aid Form. Students chosen for these grants must demonstrate positive leadership, special talent, or general service in high school, college, or local community activities. A student must apply annually to be considered for an Elizabethtown College Grant. A renewal applicant must have at least a 1.80 cumulative average by the end of the freshman year, a 1.90 cumulative average by the end of the sophomore year, and a 2.00 cumulative average by the end of the junior year. In addition, continued significant levels of participation in college or community activities must be evident.

Other Grants

There are several other grant programs for students who meet specific criteria of eligibility. ***Parish Grants*** of \$200 per year are available to students who are members in good standing of the Church of the Brethren. ***Sibling Grants*** of \$250 per year are available when two members of the same family enroll as regular full-time students at the College during the same academic year. The children of full-time ministers in the Church of the Brethren are eligible for the ***Minister's Child Grant*** of \$200 per year. Information to verify eligibility is secured from the student's institutional financial aid application.

Employment

Work-Study Program

The College sponsors a Work-Study Program developed by the Federal Government under the Federal Economic Opportunity Act of 1964 for students who can demonstrate financial need. The need of each student is determined by the Financial Aid Form. A student employed under the Work-Study Program works in the same areas as a student employed under the Self-Help program. Work-Study students are given job priority over Self-Help students.

Elizabethtown College Self-Help Program

The College provides a large number of part-time employment opportunities for students in the dining hall, library, laboratories, residence halls, academic departments, and other areas. The dollar value of the assignments depends upon the nature of the work and the number of hours that the student can work each week. Students are paid at the rate established by the federal government for full-time students. Students currently enrolled at Elizabethtown College and, among them, students requiring financial aid, are given preference for student employment. The filing of a Financial Aid Form is requested but not required for this program.

Loans

National Direct Student Loan Program

Loans amounting to a maximum of \$1000 per academic year are available through the College to qualifying students. The cumulative undergraduate borrowing ceiling is \$4000. To be eligible, a student must be enrolled or accepted for enrollment as at least a half-time student, must demonstrate a definite need for a loan to pursue his course of study, and must be capable of maintaining a satisfactory academic standing. The financial need of the student is determined by the Financial Aid Form.

The student borrower is not required to repay any principal or interest while he maintains satisfactory academic standing at the College. Upon graduation or other withdrawal, the borrower is given a repayment schedule and a six-month grace period. The interest rate is currently five percent per year on the outstanding balance. This loan program currently has a cancellation benefit for those students who plan to enter certain education fields; deferments are granted for graduate school, Peace Corps, VISTA, and the Armed Services.

Sample NDSE Quarterly Payment Plan

Amount Borrowed	No. of Qtrly. Payments	Quarterly Principal Payment	Finance Charge
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3% on unpaid principal

\$1000	12	\$ 90	\$ 45.45
2000	23	90	174.23
3000	34	90	386.33
4000	40	100	615.00
5000	40	125	768.75
6000	40	150	922.50

5% on unpaid principal

\$1000	12	\$ 90	\$ 75.75
2000	23	90	290.38
3000	34	90	643.88
4000	40	100	1025.00
5000	40	125	1281.25
6000	40	150	1537.50

State Guaranteed Student Loan Program

Under the provisions of the Federal Higher Education Act of 1965 as amended in 1976, most states have a Guaranteed Loan Program for college students. Students should consult their guidance counselor or a local banking institution for more information on the program. The programs are comparable in most states.

The maximum loan per academic year is \$2,500 and \$12,500 per undergraduate experience (four years). The federal government will pay the interest on all eligible Guaranteed Loans until six months following the student's separation from the College at which time the student assumes the responsibility of repayment. The loan carries an interest rate of nine per cent. Applications are available only from participating lending institutions, a list of which is available from the student's secondary school counselor. Processing should begin on these loans no later than June 1 of each year in order for students to receive the funds in time for registration. Families with adjusted gross incomes exceeding \$30,000 may be eligible for a GSL but must submit a Needs Test.

Sample Guaranteed Loan Monthly Repayment Schedule

Annual Percentage Rate 7%

Amount Borrowed	No. of Mnthly. Payments	Monthly Principal & Interest Payment	Finance Charge
\$ 1000	36	\$ 30.88	\$ 111.68
2000	84	30.19	535.96
3000	120	34.84	1180.80
4000	120	46.45	1574.00
5000	120	58.06	1967.20
6000	120	69.67	2360.40
7000	120	81.28	2753.60
8000	120	92.89	3146.80
9000	120	104.50	3540.00
10000	120	116.11	3933.20

Sample Guaranteed Loan Monthly Repayment Schedule

Annual Percentage Rate 9%

\$ 1000	36	31.80	144.80
2000	84	32.18	703.12
3000	120	38.01	1561.20
4000	120	50.68	2081.60
5000	120	63.35	2602.00
6000	120	76.02	3122.40
7000	120	88.69	3642.80
8000	120	101.35	4162.00
9000	120	114.01	4681.20
10000	120	126.68	5201.00

Parent Loan Program

This program allows parents to borrow up to \$3,000 a year for each child in college, up to a total of \$15,000. The regulations require parents to begin repayment within 60 days after they receive a loan. Interest on loans will be 12 percent.

External Financing Plans

The Girard Edu-Check Plan, available through Girard Trust Bank, enables the family to pay for college expenses on a monthly basis from current income. An important feature of the plan is the insurance coverage: if the parents' earning power is destroyed by disability or death, funds are provided each year to enable the student to complete his education.

Richard C. Knight Insurance Agency, Inc. offers a similar plan, called the New Insured Tuition Payment Plan. Information about the plan is available by writing Richard C. Knight Insurance Agency, Inc./New Insured Tuition Payment Plan/53 Beacon Street/Boston, MA 02108.

FINANCIAL AID APPLICATION PROCEDURE

Each applicant must file a financial aid application with the Financial Aid Office no later than April 1 to be considered for financial assistance for the following academic year. However, students applying for the Elizabethtown College Academic Scholarship must file by March 1. A student may secure an application for financial assistance by writing to the Financial Aid Office.

Each applicant for financial assistance must submit a Financial Aid Form to the College Scholarship Service in Princeton, New Jersey for processing. The form is based on a *completed* tax return. The Financial Aid Form enables the College to evaluate each applicant's need on a standard basis and may be secured from high school counselors or the Financial Aid Office at Elizabethtown College. (Students who are interested in applying only for the Elizabethtown College Academic Scholarship or Presidential Scholarship do not have to file a Financial Aid Form.)

Since it usually requires at least one month to process a Financial Aid Form, students should complete the statement and mail it to the College Scholarship Service no later than March 1 of each year for the College to have the results by the April 1 deadline. A student's financial aid application will not be considered complete until the results of the Financial Aid Form and the Financial Aid Application are received by the Financial Aid Office.

GENERAL INFORMATION REGARDING FINANCIAL AID

Elizabethtown College will begin making financial aid awards for the 1983-84 and 1984-85 academic year in October 1982, and October 1983, respectively. The Financial Aid Office hopes to notify all financial aid recipients before the end of June 1983, and June 1984. Those who require an earlier decision of their

financial aid application due to special circumstances should write directly to the Financial Aid Office indicating the reason why early consideration is required. The Financial Aid Office will try to inform them of the College's action. Those who have not received any reply from the College regarding financial aid by the end of June 1983, or June 1984 should contact the Financial Aid Office immediately. The Financial Aid Officer will be happy to schedule a personal interview with students and parents regarding their financial situation and the possibilities of financial aid at Elizabethtown College. An appointment may be obtained by writing to the Financial Aid Office at the College.

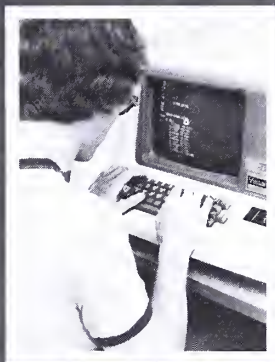
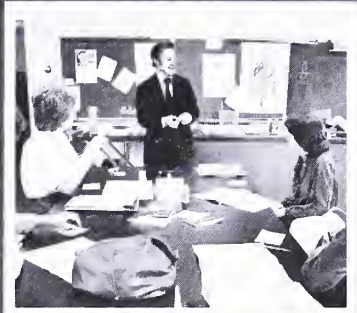
Since the sources of financial aid which are administered by the College are limited, the College is not able to award financial assistance to every qualified applicant. Students are encouraged to contact their high school counselors regarding other scholarships awarded by local organizations such as the Lions Club, Kiwanis Club, and the PTA. Students should check with their parents' employers regarding scholarship programs, and should investigate other external sources of financial aid such as the State Scholarship and Loan Programs.

All requests for applications and other information regarding financial aid should be directed to the Financial Aid Office, Baugher Student Center, Elizabethtown College, Elizabethtown, Pennsylvania 17022.

The complete counseling services of the Financial Aid Office are available to both enrolled and prospective students; services include information dissemination, budgeting assistance, and general assistance in planning the financing of a college education.

Appointments are scheduled between the hours of 8:30 a.m. and 5:00 p.m., Monday through Friday. The above financial aid policies and program descriptions are subject to change at any time as the result of new or amended state or federal legislation and changes in Elizabethtown College policies.

The Academic Program



The Academic Program

DEGREES OFFERED

Elizabethtown College grants three residence degrees: the Bachelor of Arts, Bachelor of Science, and Associate of Science.

Both bachelor degrees require the completion of 128 semester hours of credit, an average of at least 2.00 in the major, an average of at least 2.00 overall, and the completion of all requirements of the major and the General Education Core. Requirements for the associate degree, offered only in medical secretarial science, are the same except that only 64 credits are needed. The College does not guarantee graduation to any student unable to complete requirements of a specific program or academic major.

The College offers four additional degrees through the Center for Continuing Education: the Bachelor of Liberal Studies, the Bachelor of Professional Studies; the Associate of Arts, and the Associate of Science.

THE ACADEMIC MAJOR

The College offers degrees in the following academic majors within which a number of options and concentrations are available. For details of courses, options, concentrations, and major requirements, students should consult the departmental listings in this catalog.

Accounting (Business), B.S.
 Biology, B.S.
 Business Administration, B.S.
 Business Education (Business), B.S.
 Chemistry, B.S.
 Communication Arts, B.A.
 Computer Science, B.S.
 Early Childhood Education, B.S.
 Economics (Business), B.A., B.S.
 Elementary Education, B.S.
 Engineering (Physics), B.A.
 English, B.A.
 Forestry and Environmental Management (Interdisciplinary), B.S.
 General Science Certification (Interdisciplinary), B.S.
 History, B.A.
 Mathematics, B.S.
 Medical Secretarial Science (Business), A.S.

Medical Technology (Chemistry), B.S.
 Modern Languages, B.A.
 Music, B.A.
 Music Education, B.S.
 Music Therapy, B.S.
 Occupational Therapy, B.S.
 Physics, B.S.
 Political Science, B.A.
 Psychology, B.A., B.S.
 Religion and Philosophy, B.A.
 Social Studies Certification (Interdisciplinary), B.S.
 Social Work (Sociology), B.A., B.S.
 Sociology, B.A., B.S.
 Sociology-Anthropology, B.A., B.S.

THE COLLEGE WRITING COMPETENCY REQUIREMENT

Those incoming freshmen whose record fails to demonstrate basic language skills and writing ability are required to take either (1) English 101 (Basic English) followed by English 102 (Expository Writing) or (2) English 102. Those students who demonstrate a high level of proficiency in language and writing skills will be permitted to proceed to English 105 (Introduction to Literature).

THE GENERAL EDUCATION CORE

Through the General Education Core curriculum the College affords each student a broad exposure to the liberal arts and the sciences, and thus ensures a general comprehensive education which complements both the more intensive studies in the academic major and the less structured framework of elective courses. Core courses (identified below and in the course listings) are of two kinds: prescribed individual course requirements, and area distribution requirements in which students may choose from among a list of approved courses within the general prescribed academic area.

Alternatives to the Core curriculum, or deviations from it, must be approved by the Academic Standing Committee.

A detailed list of Core requirements and courses follows.

College Requirement

Area	B.A. Hours	B.S. Hours	A.S. Hours	
International Education	6	6		All students shall take a minimum of six semester hours of courses above the 100 level in foreign cultures or international affairs, contemporary or historical. This requirement can be met with courses taken in the core, major, or elective areas.

Core Area Requirements

Area	B.A. Hours	B.S. Hours	A.S. Hours	
Literature	6	6		Complete English 105 and one other course from among the English, French, Spanish, or German literature courses listed below. Note: courses in composition, literary criticism, or the teaching of English do not fulfill the literature Core requirement.
			3	Complete English 105.
Modern Language	6	6*		Each student for the bachelor of arts degree must complete six credits of intermediate language or demonstrate competency equal to intermediate college language 202. Normally, students with two to three years of high school language will, through proficiency tests, place directly into 201–202, thereby fulfilling the Core requirement; such students will not receive credit for beginning language 101–102, should they decide to take it. However, students with a poor high school language background who do not place directly into intermediate language must take, and upon the recommendation of the instructor will receive credit for, 101–102. Such students must still take 201–202 to meet the Core modern language requirement. *Some majors do require a language for a bachelor of science degree; students should check the program description in this catalog.
Fine Arts	3	3	3	Complete three hours in any of the art, communication arts, and music courses listed below.
Religion and Philosophy	6	6	3	Complete the required hours in any of the philosophy and religion courses listed below.
History	6	6		Complete History 105 and one other history course from among the history courses listed below.
			3	Complete History 105.
Social Science	9	9		Complete the required hours in any of the economics, political science, psychology, anthropology, and sociology courses listed below.
			6	Complete Sociology 101 and Psychology 105.

Area	B.A. Hours	B.S. Hours	A.S. Hours	
Mathematics	3	6		Complete the required credit hours from among the mathematics courses listed below. Note: many mathematics courses require prerequisite lower-level mathematics courses; Mathematics 011 does not fulfill the mathematics Core requirement.
Science	8	8		Complete the required credit hours from among the biology, chemistry, physics, and earth science courses listed below, taking two courses in one science, or one course in physics and one in earth science. Students must take the associated laboratory if the course is to count for Core. Note: many science courses require prerequisite lower-level science courses; geography courses do not fulfill the science Core requirement.
			8	Complete the required credit hours in either biology or chemistry.
Physical Education	4	4	2	Complete four activity courses, including at least one but not more than two aquatics activities, from among the courses listed below. Physical Education 270 counts as three hours towards graduation, but fulfills only one credit towards Core. Physical Education 150, 160, 260 will count for Core credit only once each. No more than six physical education credits may be counted toward the 128 for graduation. Course titles may not be repeated; no student who passes a swimming course may take the swimming proficiency test for credit.

Courses which fulfill the area requirements noted above follow.

International Education Requirement

Anthropology 202, 211, 307, 308. Art 355. Business Administration 372. Economics 307, 308. English 320, 322, 323, 327, 328. History 205, 211, 212, 213, 214, 215, 216, 313, 314, 317, 318, 323, 324, 327, 328. Modern Foreign Languages (French, German, Spanish) 201, 202, 221, 222, 323, 324. Music 441. Political Science 205, 301, 342. Religion 221, 222.

Core Courses

Literature

English 213, 241, 242, 312, 313, 314, 317, 318, 320, 322, 323, 327, 328, 331, 332, 333, 337, 338, 339, 340, 341, 342, 352, 357. Language 323, 481-490.

Fine Arts

Art 105, 211, 251, 324, 355, 371-380. Communication Arts 151, 168, 252, 257, 268. Music 101, 102, 105, 111, 120, 235, 415, 417, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 360, 361, 362, 365, 368, 369.

Religion and Philosophy

Religion 105, 115, 125, 201, 202, 213, 221, 222, 230, 231, 310, 320, 330, 340, 370-379. Philosophy 105, 115, 201, 212, 255, 310, 320, 340, 370-379.

History

History 201, 202, 205, 215, 216, 306, 313, 314, 315, 316, 317, 318, 323, 324, 327, 328, 330-339, 340-349, 370-379, 390, 403, 406, 411, 412, 480-489, 498-499.

Social Science

Anthropology 201, 202, 211, 307, 308, 360, 371-380, 481. Economics 101, 102, 301, 302, 303, 304, 306, 307, 308, 309, 370-379, 480-489. Political Science 105, 117, 118, 202, 205, 301, 305, 308, 327, 329, 333-339, 342, 370-379, 401, 413. Psychology 105, 106, 213, 215, 221, 225, 235, 317, 322, 333, 334, 370-379, 401, 402, 413, 414, 425, 435, 471-472, 480-489, 491-492. Sociology 101, 105, 201, 215, 220, 222, 237, 305, 317, 330, 331, 332, 342, 344, 350, 371-380, 481-491.

Mathematics

Mathematics 101, 117, 121, 122, 151, 172, 201, 211, 212, 222, 252, 301, 302, 321, 324, 341, 351, 352, 361, 362, 370-379, 421, 422, 441, 480-489.

Science

Biology 105-105L, 106-106L, 108-108L, 111, 112, 201, 202-202L, 212, 215-215L, 222, 235, 313-313L, 321, 322-322L, 324-324L, 331, 332, 341, 342, 343, 347, 352, 370, 379, 380-389, 412, 480-489.

Chemistry 101, 104, 113, 114, 213, 214, 242, 232L, 324L, 343, 344, 351, 352, 370-379, 402, 421, 490-495.

Earth Science 105, 107, 108, 111, 112, 301, 370-379, 481-489.

Physics 111, 203, 204, 132, 231, 232, 305, 306, 343, 344, 345, 370-379, 403, 404, 407, 408, 481-489, 490.

Physical Education

Physical Education 105, 115, 125, 135, 145, 150, 155, 160, 165, 185, 195, 205, 210, 217, 218, 225, 235, 240, 245, 250, 255, 260, 265, 290, 295, 370-380, 481-490.

PROGRAM VARIATIONS AND OPTIONS

In addition to the major programs indicated above, Elizabethtown College offers a number of alternative learning opportunities: off-campus study abroad and in joint programs at other academic institutions and affiliated clinical facilities, and in a number of special study programs which emphasize individual study and close work with a member of the faculty.

Off-Campus Study**Study Abroad**

The College participates in programs offering study abroad in Germany, France, Spain, and England.

The six colleges associated with the Church of the Brethren cooperate in the Brethren Colleges Abroad (BCA) program, offering a junior year of study in Germany, France, or Spain. Students may study at Phillips-Universität, Marburg/Lahn, West Germany; at the University of Strasbourg, France; or at the University of Barcelona, Spain. A wide selection of courses is offered in the social sciences and the humanities. Students are given intensive language instruction prior to the opening of the university semesters.

To qualify for the BCA program, students bound for Germany must have completed the equivalent of the second year of German in college and have approximately a B average. Although most students bound for France or Spain must also have completed the equivalent of two college years of French and Spanish, outstanding students who have completed the first year will be accepted. Other qualifications include seriousness of purpose, good character, demonstrated potential for social adjustment, and a basic understanding of the United States and the host country. The credits earned abroad are transferred toward the degree at Elizabethtown. A faculty adviser is in residence in Europe during the year.

The program accommodates about 25 students at each university; Elizabethtown College has a quota of three or four for each. Interested students should confer with Dr. J. Kenneth Kreider, BCA Program Coordinator, and their major adviser.

As part of the BCA program the College offers a semester in England. Although originally designed for early childhood, elementary, and secondary education majors, all majors are now eligible. Students attend full-time at St. Mary's College, Cheltenham, England, where they enroll in a Seminar in British Culture and Education, and select an additional three or four courses. Credit for these courses is applied toward the degree at Elizabethtown College. First semester students depart in early September and return before Christmas; second semester students depart in late January and return in late May. For information contact Dr. Kreider.

Joint Institution Programs

In these programs students study at the College and at affiliated academic institutions or clinical facilities. There are three major programs with other academic institutions: pre-forestry with Duke University, pre-engineering with Pennsylvania State University, and pre-nursing with Georgetown University. Programs with other institutions are under consideration.

In the pre-forestry program the student spends three years at the College and an additional year in professional studies at Duke, at which time the College grants the bachelor of science degree; an additional year at Duke leads to a master's degree in forestry or environmental management. For further details see the interdisciplinary section of this catalog, page 98.

The pre-engineering major is a 3-2 program with Penn State University. After completing three years at Elizabethtown College, the stu-

dent transfers to University Park, completes two years of work in an engineering field, and receives a bachelor of arts degree from Elizabethtown College and a bachelor of science degree from Penn State University. For further details see the description in the Physics Department listing of the catalog, page 83.

In the pre-nursing program the student spends two years at the College and an additional two years at Georgetown University, at the end of which time Georgetown grants the bachelor of science degree. For further information consult the description in the Biology Department listing of the catalog, page 44.

The College also offers a number of programs in which work at affiliated clinical facilities constitutes an important part of the student's education. In the music therapy, occupational therapy, social work, medical technology, and medical secretary programs, students combine work at the College with first-hand experience in hospitals, clinics, professional offices, and social work and therapy programs. For detailed descriptions see the listings under the Departments of Music, Occupational Therapy, Sociology/Anthropology/Social Work, Chemistry, and Business.

On-Campus Study

Special Study Programs

Elizabethtown College recognizes the advantages and the need of education and study outside the traditional classroom, and offers the following special study programs:

Independent Study shall be undertaken for the special investigation of a topic or for the benefit of the advanced student whose special academic requirements cannot be met by regular catalog offerings. It should not be used simply to assemble credits for graduation. To apply for an Independent Study one must make a preliminary definition of the topic or issue to be pursued, securing the permission of the faculty sponsor and the chairman of the department in which the Independent Study is undertaken. The faculty member or members sponsoring the Independent Study will be involved in planning and evaluating the project, but the student should be capable of independent work. Independent Study is not tied to the academic calendar, and a project may be begun or ended at any point. It is to be registered with the Registrar at the beginning of the semester during which it will be completed. Application forms for Independent Study are available at the Registrar's Office.

Directed Study is a second type of study available to matriculated students at Elizabethtown College. In contrast to independent study of a special topic, Directed Study will be undertaken for a regular catalog course which is not a part of the course offerings for the given semester. This method of study should be used by the student who needs rather frequent conferences with the professor.

An additional tuition surcharge, which may change from year to year, is also the responsibility of the full-time student who registers for Directed Study. Part-time students who are granted permission to register for a Directed Study course pay the current part-time rate for tuition plus the same surcharge. Full-time students whose load exceeds 18 hours as a result of the D.S. registration shall be charged the current part-time rate for tuition for those hours in excess of 18, plus the same surcharge for all Directed Study credits.

Tutorials are available where remedial work is necessary for the student to profit from a classroom course. A tutorial involves more frequent meetings between professor and student than either Independent Study or Directed Study. Generally a faculty member will not teach more than one tutorial per semester.

Any student who enters into a tutorial agreement will be responsible not only for the regular tuition, but also for a surcharge which varies from year to year.

It is the responsibility of the student to locate a professor who is willing to enter into the tutorial agreement. The student shall register for these studies in the Registrar's Office.

DEVELOPMENTAL STUDIES

As part of Elizabethtown College's increasing efforts to make a college education available to a variety of students, the Developmental Studies Program is designed for the motivated student with academic potential, but with less-than-adequate education credentials (SAT scores, high school grades, and/or rank).

The Developmental Studies Program has several thrusts. First, it offers academic courses in the fall semester geared to introducing the student to the rigors of college-level study. Second, the Program provides strong support services (academic advising, peer and professional tutoring, and group and peer counseling) to its students. Third, the Program offers instruction to aid in achieving basic competency in the mathematics, reading, and writing skills

necessary for competing successfully in college-level courses. To complete the student's first semester schedule of twelve to fourteen semester hours, courses from areas such as physical education, history, sociology, religion, and psychology are available for the student. Each entering freshman's academic course load is individually scheduled to provide the greatest opportunities for the student who waits to declare a major area of study until his exit from the program.

The following courses comprise the Program's offerings:

MA 011 Intermediate Algebra

2 credits. The course deals with the study of the fundamental algebraic and computational skills used in certain science courses and prerequisite to Mathematics 101 and 117. Letter graded

EN 101 Basic English

3 credits. The course emphasizes the basic skills of writing (grammar, usage, mechanics) with primary application in paragraph writing. Letter graded.

DS 031 Reading/Study Skills

1 credit. This course provides instruction in reading improvement and related study skills. Large class, small group and independent assignments are integrated in a program that emphasizes content-related reading needs. Textbooks and a variety of materials enable students to build a foundation in theories and techniques of effective reading on which to build a system of study adapted to individual needs. Letter graded.

DS 041 Techniques for Academic Success Seminar

1 credit. The TAS Seminar is an introduction to the physiological and psychological approaches to learning. This seminar includes an assessment and development of listening skills, study techniques, academic motivation, time management, priority setting, critical thinking, textbook analysis, and other topics. Letter graded.

CONTINUING EDUCATION

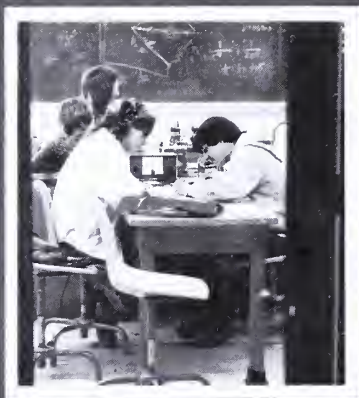
Elizabethtown College regards the training and education of adults as integral to its academic program. To reflect that commitment, the College offers study options that allow students to complete bachelor of arts and bachelor of science degree requirements through evening and Saturday study. Additionally, certificate programs for persons who are beginning college work, and diploma programs for college graduates are available both on and off campus at times convenient to working adults.

Individuals may also earn Elizabethtown College degrees through study at the University Center in Harrisburg, a consortium comprising Elizabethtown College, Lebanon Valley College, the University of Pennsylvania, Temple University, and The Pennsylvania State University.

In addition to these traditional learning options, the College offers an external degree program in which adults work with faculty advisers to develop individualized plans of study leading to associate, bachelor of professional studies, or bachelor of liberal studies degrees. Credit earned through traditional classroom education, special studies, and testing is combined with learning achieved through life and work experience to meet external degree requirements. As a service to adults working in business, industry, and health care, the College also sponsors a number of non-credit seminars and workshops.

For detailed information on continuing education programs at Elizabethtown College contact the Center for Continuing Education, Niccary Hall, Elizabethtown College.

Course Descriptions



Course Descriptions

Following, arranged alphabetically by departments or programs, are the courses offered by the College. For each department, there is first a section treating the programs offered. This is followed by a second section which discusses the required courses in each program or concentration.

Some departments offer majors or concentrations in more than one academic discipline. For convenience, these academic disciplines are listed alphabetically in the text, and the reader is there referred to the appropriate department.

ACCOUNTING

See Department of Business, page 47.

ANTHROPOLOGY

See Department of Sociology-Anthropology-Social Work, page 94.

DEPARTMENT OF ART

Professor Henry M. Libhart (*Chairman*)

The academic and the practical courses in the art program aim to help students refine their creative potential and expand their judgment of the visual arts. Studio courses in two-dimensional media are offered, but physical limitations necessitate permission of the Registrar for any student to enroll in a studio course. There are no prerequisites for any of the art courses at the College.

105 Drawing

3 credits. (Core) Studio practice in basic drawing media for sketching and rendering both live and inanimate subjects.

211 Oil Painting

3 credits. (Core) Studio easel painting in opaque media with stress on pictorial organization and application of color theories.

251 Printmaking

3 credits. (Core) Experience in silk-screen operations and the several methods of relief and intaglio plates, and instruction in the use of the printer's machinery.

324 American Arts and Crafts

3 credits. (Core) Comprehensive scan of U.S. arts, observing their derivation from social, ethnic, and aesthetic influences.

355 Introduction to Art

3 credits. (Core) Experience with selected works by major and minor artists of the modern epoch, as a means of recognizing and evaluating artistic style.

371-380 Seminars in Fine Arts

Variable credit. (Core) Offered as occasion justifies.

DEPARTMENT OF BIOLOGY

Professors Heckman, Hoffman, Pepper
Associate Professors, Dively (*Chairman*),
Laughlin, Polanowski

Bachelor of Science

The courses of the Department of Biology have been designed to provide a foundation in basic concepts and principles involving the structural, functional, and environmental aspects of the living world. The Department seeks to provide the liberal arts student with a choice of courses emphasizing biological theories which provide a broad and unifying understanding of nature's life forms and man.

The curriculum for a Bachelor of Science in Biology is designed for optimal individualized scientific preparation for success in graduate school, professional schools of medicine, and allied fields, as well as for the student desiring immediate entry into biologically oriented employment opportunities.

The Department makes a special effort to involve students in research projects with professors, and senior seminar and independent studies.

The Department of Biology offers six concentration options:

The biology major option prepares the student for a biologically related profession or for graduate school. The specific requirements are Biology 111, 112, 215, 215L, 212, 313, 313L, 412, and 12 additional hours in biology, including one course selected from 321, 322–322L, or 324–324L, one course selected from 235, 331, or 332, and one course selected from 347, 341, 342, or 343. Other course requirements are Chemistry 113, 114, 213, 214; Physics 203, 204; Mathematics 101, 121 or 117, 172 or 151; and a foreign language through the 202-level, or through 102 plus Computer Science 125.

The biology medical option prepares the student for entry into professional schools of medicine or related fields. The specific requirements are the same as those for the biology major except that students should select Biology 235, 343, 341, or 342 instead of 331, 332, or 347.

The secondary education certification option prepares the student for the receipt of Pennsylvania Secondary Education Certification within the framework of the *Biology major option* (see above). This option is designed to provide a strong background in the sciences while simultaneously fulfilling the requirements for secondary teaching certification. The specific requirements are Biology 111, 112, 215,

215L, 212, 313, 313L, and one course selected from among 321, 322–322L, or 324–324L, and 9 additional hours in biology. Other course requirements are Chemistry 113, 114, 213, 214; Physics 203, 204; Mathematics 101, 121; or 117, 172 or 151; Psychology 105; Education 305, 225d, 415, 225e, and 473. Persons interested in this concentration should consult with Dr. Hoffman.

The secondary general science certification option enables the student to receive secondary school general science certification. Students interested in this area should consult the detailed description in the interdisciplinary section of this catalog, page 99. Further information may be obtained from Dr. Hoffman.

The biology pre-forestry option offers a biology concentration in the five-year cooperative program in forestry and environmental management with Duke University, leading to a bachelor of science degree from Elizabethtown College and a master of forestry or master of environmental management degree from Duke University. Students interested in this option should see the detailed description in the interdisciplinary section of this catalog, page 98. Further information may be obtained from Mr. Laughlin.

The biology pre-nursing option offers a biology program with Georgetown University leading to an (accredited) bachelor of science degree in nursing. In this program the student spends the first two years at Elizabethtown College and transfers to Georgetown University for the junior and senior years. The degree is conferred by Georgetown University.

Admission to the School of Nursing at Georgetown requires a cumulative grade point average of 3.0 in the pre-nursing program at Elizabethtown and the recommendation of the Department of Biology. Students having less than a 3.0 cumulative grade point average will be considered on an individual basis with two recommendations from Elizabethtown College.

Pre-nursing students should take Biology 111, 201, 202–202L, 235; Chemistry 101, 104; Mathematics 151; Psychology 105, 225, 322; Sociology 101; 6 credits in English including 3 credits of composition; 6 credits of philosophy and ethics; 6 credits of religion; 7 elective credits. Students transferring to Georgetown may be required to take a four-week nursing program in August prior to matriculation at Georgetown. Further information may be obtained from Mr. Heckman.

105 Principles of Biological Science

3 credits. (Core) Designed for the non-biology major. An overview of basic biological principles and concepts, emphasizing their relevancy to our daily lives. Discussion of current issues and problems in an attempt to provide an understanding and respect for the basic mechanisms of life. *Co-requisite (to satisfy Core) Biology 105L (but can-*

not be taken for credit after completing Biology 111).

105L Principles of Biological Science Laboratory

1 credit. (Core) Designed to accompany Biology 105, these laboratory exercises demonstrate many of the important biological principles covered in the lecture course. *Prerequisite or corequisite Biology 105.*

106 Genetics, Evolution, and Man

3 credits. (Core) Designed for the non-biology major. A discussion of the fundamentals of genetics as they relate to man, followed by a study of the mechanics of evolution, their significance, and the evolution of man. *Corequisite (to satisfy Core) Biology 106L.* Spring, alternate years.

106L Genetics, Evolution, and Man Laboratory

1 credit. (Core) A series of laboratory exercises intended to illustrate some of the principles of genetics and mechanisms of evolution. *Prerequisite or corequisite Biology 106.* Spring alternate years.

108 Man and His Environment

3 credits. (Core) Designed for the non-biology major. Discussion of basic principles of environmental interrelationships, and a consideration of specific problem areas such as pollution, radiation, and population growth with regard to those principles. *Corequisite (to satisfy Core) Biology 108L.* Spring semester.

108L Man and His Environment Laboratory

1 credit. (Core) Includes field trips to water and sewage treatment plants, testing for various contaminants in the environment, and exercises in measurement of consumption and planning. *Prerequisite or corequisite Biology 108.* Spring semester.

111 General Biology

4 credits. (Core) The study of the chemical and cellular basis of life, animal anatomy and physiology, cellular reproduction, heredity, and animal development. This course is designed for biology majors and those students taking additional biology courses beyond Biology 112. Hours: lecture 3, laboratory 2. Fall semester. *Cannot be taken for credit after completing Biology 105 without permission of instructor.*

112 General Biology

4 credits. (Core) The study of the evolution, diversity, and ecology of organisms, the animal kingdom, photosynthesis, plant anatomy and physiology, viruses, monera, and the plant kingdom. This course is designed for biology majors and those taking additional biology courses. Hours: lecture 3, laboratory 2. *Prerequisite Biology 111.* Spring semester.

201 Human Anatomy

4 credits. (Core) A study of human structure at the tissue, organ, and system levels. Particular attention given to the correlation of structure to normal and abnormal function. Laboratory work involves dissection of human cadavers and a cat. Student enrollment limited to occupational therapy, nursing, and medical technology majors. Hours: lecture 2, laboratory 4. *Prerequisite Biology 111, permission of instructor.* Fall semester.

202 Human Physiology

3 credits. (Core) A functional study of cells, tissues, organs, and organ systems of man; emphasis on disorders as they relate to the understanding of normal function. Enrollment limited to occupational therapy, nursing, and medical technology majors. *Prerequisite Biology 111, permission of instructor.*

202L Human Physiology Laboratory

1 credit. (Core) A study of selected cardiovascular, respiratory, renal, muscular, neural, and endocrine control mechanisms; emphasis on "hands on" manipulation of instruments useful to the health profession student. *Prerequisite or corequisite Biology 202.* Spring semester.

212 Molecular Biology

3 credits. (Core) An integrated and comprehensive review of recent biological developments at the molecular level. Information, drawn from a wide variety of biological disciplines, concerning the interaction of biological molecules. *Prerequisite Biology 112 or permission of instructor.* Spring semester.

215 Genetics

3 credits. (Core) A study of classical and neo-Mendelian principles of heredity. *Prerequisite eight hours of biology or permission of instructor.*

215L Genetics Laboratory

1 credit. (Core) Techniques of genetic experimentation. *Prerequisite or corequisite Biology 215*

222: Immunology

3 credits. (Elective) A basic course in immunology encompassing immunity, serology, immunochemistry and immunobiology. Considered antigenic specificity, humoral and cellular effector mechanisms, hypersensitivities, immunogenetics, tolerance and enhancement, tissue and tumor immunity, as well as recent methodological advances. *Prerequisite Biology 112 or permission of instructor.* Spring semester.

235 General Microbiology

4 credits. (Core) A study of the morphological, physiological, cultural, and ecological characteristics of bacteria, including immunological principles. A laboratory gives practice in the isolation and identification of bacteria. Hours: lecture 2, laboratory 5. *Prerequisite Biology 112, Chemistry 114, or permission of instructor.*

313 General Ecology

3 credits. (Core) The relationships between plants, animals, and their environment are investigated with regard to energy flow, mineral cycling, physical and chemical parameters, population changes, and community structure. *Prerequisite 16 hours of biology or permission of instructor.* Fall semester.

313L General Ecology Laboratory

1 credit. (Core) Use of techniques and instrumentation for aquatic and terrestrial field studies, experimentation in such areas as animal behavior, population growth, competition, productivity, and mineral cycling. *Prerequisite or corequisite Biology 313.* Fall semester.

321 Plant Physiology

4 credits. (Core) A study of plant growth and development, including a discussion of photosynthesis, mineral nutrition, carbon and nitrogen metabolism, water relations, and plant hormones. Hours: lecture 3, laboratory 4. *Prerequisite Biology 331, and Chemistry 104, or permission of instructor.* Fall semester.

322 Cell Biology

2 credits. (Core) A morphological and physiological study of cells and cell mechanisms. Metabolic activities are studied and associated with cell organelles. *Prerequisite Biology 112, Chemistry 114.* Spring, alternate years.

322L Cell Biology Laboratory

2 credits. (Core) A qualitative and quantitative study of cellular chemical construction and enzymatic pathways through various extraction and analysis techniques. *Prerequisite or corequisite Biology 322.* Spring, alternate years.

324 General Physiology

3 credits. (Core) A functional study of vertebrate organs and organ systems. Attention focused on similarities and specialization in relation to function, with emphasis on functional adaptations to the environment. *Prerequisite Biology 112, or permission of instructor.* Spring semester.

324L General Physiology Laboratory

1 credit. (Core) An investigation of selected physiological mechanisms, employing spectrophotometers, datagraphs, spirometers, oscilloscopes, electrocardiographs, electrophoresis, and animal surgical techniques. *Prerequisite or corequisite Biology 324.* Spring semester.

331 Comparative Plant Morphology

4 credits. (Core) A comparative study of the plant kingdom with emphasis upon the various levels of organization, structure, and the development and relationships of the major plant groups. Hours: lecture 3, laboratory 4. *Prerequisite Biology 112 or 105.* Fall, alternate years.

332 Taxonomy of Vascular Plants

4 credits. (Core) Examination of family characteristics useful in plant identification, using live material and transparencies. Taxonomic principles and distribution of plants discussed. Plant collection and some Saturday trips required. Hours: lecture 3, laboratory 4. *Prerequisite Biology 112 or 105.* Spring, alternate years.

341 Comparative Anatomy

4 credits. (Core) A comparative and embryological study of morphology of selected representatives from the phylum chordata. Laboratory work involves dissection and demonstration of organisms from major chordate groups. Hours: lecture 2, laboratory 4. *Prerequisite Biology 112.* Fall semester.

342 Developmental Biology

4 credits. (Core) A survey of biological development covering the molecular, cellular, and organismic levels with special emphasis on control mechanisms. The laboratory emphasizes vertebrate animal development. Hours: lecture 2, laboratory 4. *Prerequisite Biology 215.* Spring semester.

343 Histology and Bio-Medical Technique

4 credits. (Core) A basic microscopic study of vertebrate tissues. The laboratory includes biomedical techniques of paraffin sectioning, staining, and slide preparation. Hours: lecture 2, laboratory 4. *Prerequisite Biology 112.* Fall semester.

347 Invertebrate Zoology

4 credits. (Core) A study of the evolution of invertebrate animals from simple to complex forms, structural and functional similarities and differences, and the evolutionary trends necessary for an understanding of basic adaptive features. Hours: lecture 2, laboratory 5. *Prerequisite Biology 112 or permission of instructor.* Fall, alternate years.

352 Applied Microbiology)

4 credits. (Core) A study of microorganisms as they relate to their natural environment, food processing and contamination, and to public health. Hours: lecture 2, laboratory 5. *Prerequisite* Biology 235, Chemistry 114. Spring, alternate years.

370-379 Special Topics in Biology

Variable credit. (Core) Courses of a specialized nature reflecting the interests of the instructor. Courses offered on a random basis.

380-389 Directed Study in Biology Topics

Variable credit. (Core) Directed study in biological areas in which the student meets regularly with the instructor on an individual basis. Laboratory work may include self-directing aids. *Prerequisite* permission of instructor.

412 Seminar in Biology

1 credit. (Core) Students will present laboratory or literature research to faculty and peers. Topics will vary from year to year. *Prerequisite* 18 hours in biology. Spring semester.

480-489 Independent Problems in Biology

Variable credit. (Core) Designed to allow the student to do independent research in some phase of biology. *Prerequisite* 16 credits in biology, permission of instructor and Department Chairman.

Education 305 Practicum in Secondary Education: Science

4 credits. Teaching science in secondary schools. *Prerequisite* Psychology 105; *corequisite* Education 225d

DEPARTMENT OF BUSINESS

Professor Bitting

Associate Professors Buffenmyer, Eppley
(*Chairperson*), Evans, Gliptis, C. Kreider,
Neyer, Pomroy

Assistant Professors Akcay, S. Dolan
(*Associate Chairperson*), Hoppie, Muston,
Trostle

Instructor Klees

Bachelor of Arts; Bachelor of Science;
Associate of Science

The primary objective of the Department of Business is to provide comprehensive programs of professional education for young men and women who wish to achieve responsible positions in private and public business organizations and in academic institutions. These programs are based strongly on the tradition of a liberal arts education. Their general objectives are to prepare contemporary and future leaders, to develop a broad understanding of the nature of business and its role in society, to enlarge the students' competence in the qualities for success in the business world, and to provide the foundation for graduate study, continuing self-education, and personal development.

The Department of Business offers five programs:

Bachelor of Science in Accounting. Preparation for entrance into the profession of accounting (public, private, or governmental) requires a basic business core in addition to a proficiency in accounting. Because of the increased emphasis upon computer and quantitative techniques by business, students are urged to elect additional courses in these areas.

Bachelor of Science in Business Administration. Preparation to become tomorrow's business leader requires a broad background in business, a knowledge of the behavioral and social sciences, and the ability to use quantitative techniques in solving problems. This background and these basic tools will emerge from the business core, the General Education Core, and specific mathematics requirements. A student will gain further understanding of specific areas of business by concentrating in one or more of six areas: *accounting, computer science/business information systems, economics, finance, management, or marketing*. A student may also select a secondary

area of concentration in *communications, international business, or health science*.

Business administration offers a concentration in the forestry and environmental major. Students interested in this major should consult the detailed description in the interdisciplinary section of this catalog, page 98.

A bachelor of science degree in accounting or business administration may be earned in the evening program of the College. For further information see the special Evening Session bulletin.

Bachelor of Science in Business Education.

For students who plan to teach in the business department of a secondary school the business education curriculum provides a liberal training in courses outside the field of business, a broad background in business, depth in at least two certification areas in business, and professional education. The professional training will be conducted by personnel who have been secondary business teachers and who maintain an awareness of current developments through close relationships with business departments in area high schools and vocational-technical schools.

Bachelor of Arts or Science in Economics.

Preparation for a career in economics requires a broad background in basic economic theory coupled with an in-depth study of the quantitative tools so important to today's economist. The economics curriculum is designed to provide the student with this breadth and depth. In light of the emphasis on the quantitative approach to economic theory, students are advised to select courses in mathematics and computer science beyond those specifically required in the economics curriculum.

Economics is one of the major areas in the social studies major preparing a student for certification to teach in secondary schools. Students with interests in this area should consult the detailed descriptions in the interdisciplinary section of this catalog, page 98.

Associate of Science in Medical Secretarial Science.

This two-year program prepares students for employment in a medical office, a dental office, a hospital, or other health care facility. The curriculum includes a liberal arts core along with a series of medical secretarial courses. The program is designed to provide the student with a foundation in the behavioral and social sciences, the liberal and fine arts, as well as specific training for the medical secretary profession.

ACCOUNTING

A major in accounting includes Accounting 105, 106 (or 107, 108), 205, 206, 305, 306, 12 additional semester hours in accounting; Business Administration 215, 248, 265, 325, 331, 332; Computer Science 125; Economics 101, 102; Mathematics 117 or 121, and 151.

BUSINESS ADMINISTRATION

A major in business administration includes Accounting 107, 108, (or 105, 106); Business Administration 215, 248, 265, 325, 331, 332; Computer Science 125; Economics 101, 102; Mathematics 117 or 121, and 151. Each student must also choose one of the concentrations described below; twelve semester hours beyond those listed above must be taken in the concentration area (nine of those 12 hours must be taken on the Elizabethtown College campus). A student may also elect a secondary concentration.

For an **Accounting Concentration** Accounting 205, 206, and two other accounting courses from the department advising sheet are required. A **Computer Science/Business Information Systems Concentration** requires Computer Science 135, 309, 340 and one other three-credit course in computer science. An **Economics Concentration** requires Economics 301, 302, and two other economics courses. A **Finance Concentration** requires Business Administration 424, 425 and two of the following: Business Administration 327, Economics 303 or 304. The **Management Concentration** requires Business Administration 369, 499, and two other management courses from the department advising sheet. A **Marketing Concentration** requires Business Administration 311, 498, and two other marketing courses.

A **Secondary Concentration in International Business** requires an intermediate level of competency in foreign language, Anthropology 211, Political Science 205, Economics 307, and two other courses from the departmental advising sheet. A **Secondary Concentration in Health Science** requires four additional courses from biology and/or chemistry according to the departmental advising sheet. A **Secondary Concentration in Communications** requires Business Administration 355, Communication Arts 105, English 383, and two other courses from the departmental advising sheet.

BUSINESS EDUCATION

A major in business education includes Accounting 105, 106; Business Administration 215, 331, 332; Business Education 111, 421; Computer Science 125; Economics 101, 102; Mathematics 151; Psychology 105; and the professional education program for secondary certification: Education 415, 225d, 225e; Business Education 305, 473 (Education 305, 473). Each student must also choose two or more of the following certification areas: accounting, computer science, marketing, secretarial, typewriting. Speech proficiency is also required.

ECONOMICS

A major in economics includes Economics 101, 102, 301, 302, 309, 15 additional semester hours in economics; Computer Science 125; Mathematics, 121, 151, and 172; nine semester hours of history; and nine semester hours of political science, and/or sociology.

MEDICAL SECRETARIAL SCIENCE

The requirements for the associate degree in medical secretarial science include Business Education 212, 221, 223; Medical Secretary 101, 109, 211, 219, 272; a year of biology or chemistry; Communication Arts 105; English 105; History 105; Sociology 101; Psychology 105; two semester hours in physical education; and three semester hours each in fine arts and religion/philosophy. A 2.0 quality point average in the major (business education and medical secretary courses) is required prior to Medical Secretary 272.

ACCOUNTING

Note: Students who complete Accounting 105 may *not* enroll in Accounting 107 or 108 unless the Department of Business specifically allows them to do so. Likewise, students who complete 107 may *not* enroll in 105 or 106. The proper course sequence is either 105–106, or 107–108.

105 Principles of Accounting I

3 credits. An introductory course for students who intend to continue in accounting courses. The accounting cycle, financial statements, and assets. Fall semester.

106 Principles of Accounting II

3 credits. A continuation of 105. Liabilities, equity accounts, ratio analysis, and introduction to cost accounting. *Prerequisite* Accounting 105. Spring semester.

107 Financial Accounting

3 credits. An introductory course designed to acquaint the student with basic accounting methodology and the structure and interpretation of financial statements used in external reporting. Fall semester.

108 Managerial Accounting

3 credits. A study of the use of information gathered from accounting records and other information sources to prepare internal reports and analyses in order to assist management in control and decision-making. *Prerequisite* Accounting 107. Spring semester.

205 Intermediate Accounting I

3 credits. A thorough study of various accounting concepts and generally accepted accounting principles; the application of these principles to the various assets and related revenue and expense accounts as presented in the income statement and balance sheet. Emphasis on valuation, classification, disclosure, and cut-off. *Prerequisite* Accounting 106 or permission of instructor. Fall semester.

206 Intermediate Accounting II

3 credits. A continuation of 205. The principles of valuation, classification, disclosure, and cut-off applied to the various liability and owners' equity accounts as well as their related revenues and expenses. Topics include the study of various items affecting income determination, the statement of changes in financial position, and ratio analysis. *Prerequisite* Accounting 205. Spring semester.

301 Introduction to Federal Income Taxes

3 credits. A study of those provisions of the Internal Revenue Code which apply to individual taxpayers and sole proprietors. Students without a business background are encouraged to enroll. Fall semester.

302 Advanced Tax Accounting

3 credits. Further study of the Internal Revenue Code as it relates to partnerships, corporations, trusts and estates, and exempt organizations. State taxation of business is also covered. *Prerequisite* Accounting 301. Spring semester.

305 Cost Accounting

3 credits. The quantitative aspects of managerial cost accounting, including cost-volume-profit analysis, budgeting, standard costs, and the concept of relevant costs. *Prerequisite* Accounting 106 or 108; or permission of instructor. Fall semester.

306 Advanced Cost Accounting

3 credits. A continuation of the managerial emphasis on cost accounting, including capital budgeting, inventory control, joint-and-by-product costing, and process cost accounting. *Prerequisite* Accounting 305. Spring semester.

308 Accounting for Non-profit Organizations

3 credits. An in-depth study of the principles and uses of fund accounting; includes the budgeting process, reporting requirements for general and special financial statements, and management's uses for control and decision-making as they relate to the general operating fund, as well as restricted and nonrestricted special funds. *Prerequisite* Accounting 106 or 108. Spring semester.

370-379 Special Problems

3 credits. A course designed to allow students to explore topics and problems of current relevance in accounting.

405 Auditing

3 credits. The legal and ethical responsibilities of an auditor, the methods and procedures used in gathering evidential material, and the auditor's report. *Prerequisite Accounting 206*. Fall semester.

406 Advanced Accounting

3 credits. A detailed study of accounting theory, income statement presentation, consolidations, partnerships, and foreign exchange accounting. *Prerequisite Accounting 206*. Fall semester.

409 Contemporary Problems for C.P.A.'s

3 credits. A capstone course in accounting designed to assimilate the widely varying aspects of public accounting and update the student in the latest standards and problems. *Prerequisite Accounting 302, 405, 406; or permission of instructor*. Spring semester.

471 Internship in Accounting

Variable credit. A series of work experiences in accounting with either a public accounting firm, a business firm, or governmental agency. *Prerequisite approval of Department Chairman*.

480-489 Independent Study

Variable credit. Designed to allow the student to do independent study and research on a problem or topic in the field of accounting. *Prerequisite approval of Department Chairman and Dean of the Faculty*.

499 Seminar in Accounting

3 credits. A study of selected topics currently under discussion in the accounting field. A major research project will be required. Offered upon student demand and faculty availability. *Prerequisite permission of instructor*.

BUSINESS ADMINISTRATION**215 Principles of Marketing**

3 credits. A study of the development and implementation of marketing strategies and practices with particular emphasis on the role of marketing in business and society. *Prerequisite or co-requisite Economics 102*.

248 Quantitative Techniques for Business

3 credits. Designed to develop familiarity with statistical and mathematical methods applicable to business; includes Bernoulli and Bayesian probability, decision theory, inventory models, linear programming, queuing theory, and network models. *Prerequisite Mathematics 151, 117*.

265 Principles of Management

3 credits. A study of the process of using and coordinating technical and human resources in planning, organizing, staffing, motivating, and controlling to achieve an organization's objectives.

311 Principles of Marketing Research

3 credits. Employs scientific research methodology to solve marketing problems. Covers research design, data collection, sampling, and analysis. Stresses writing meaningful reports for management use. *Prerequisite Business Administration 215, Mathematics 151*. Fall semester.

312 Principles of Advertising

3 credits. Involves the creative and business management aspects of advertising, including campaign strategy, mass media, the advertising agency, creative techniques, advertising research, and social accountability. *Prerequisite Business Administration 215 or permission of instructor*. Spring semester.

313 Retailing Management

3 credits. A study of retailing institutions including institutional location, layout, managerial objectives and policies, consumer behavior, pricing and promotional strategies, consumer services, and expected trends. *Prerequisite Business Administration 215, 265*. Fall semester.

316 Marketing Management

3 credits. The formulation of overall marketing policies and the planning techniques for embodying these policies in marketing programs. Case analysis is stressed. *Prerequisite Business Administration 215, 248, 265*.

325 Business Finance

3 credits. Analyzes the management of funds of a business, including long and short-term sources of funds, ratio analysis, capital budgeting, the cost of capital, and the dividend decision. *Prerequisite Accounting 106 or 108*.

327 International Finance

3 credits. Explores the international finance environment in which economic policy and business decisions are made. Provides an introduction to international finance including the spot and forward exchange markets, the Eurocurrency market, international capital markets, international capital movement, and foreign exchange risk management. *Prerequisite Business Administration 325*.

331 Business Law I

3 credits. Legal principles applicable to business with emphasis on contract law. Includes the growth of law as an institution. Fall semester.

332 Business Law II

3 credits. The study of legal principles applicable to business with emphasis on partnership, corporation, and property law. *Prerequisite Business Administration 331 or permission of instructor.* Spring semester.

333 Legal Problems in Business

3 credits. An examination of statutes, problems, and issues in selected areas of the law appropriate to business. *Prerequisite permission of instructor.* Spring semester.

355 Managerial Communications

3 credits. A study of the various communications techniques for management and business. Emphasis on analysis and writing of business letters; report development, writing and presentation; and the organization of materials for effective oral and written presentations. *Prerequisite permission of instructor.*

369 Behavioral Theory in Management

3 credits. An examination of the interaction of the individual, group, and enterprise in the work environment with special attention to the basic motivational, organizational, and leadership theories and their application. *Prerequisite Psychology 105, Business Administration 265.* Fall semester.

Note: credit will not be granted for Business Administration 369 if credit has already been granted for Psychology 215.

370-379 Special Problems

3 credits. A course designed to allow students to explore topics and problems of current relevance in business.

424 Investments

3 credits. Emphasis on various classes of investments available to the investor; sources and uses of investment information, and security and markets evaluation. *Prerequisite Business Administration 325.* Spring semester.

425 Problems Financial Management

3 credits. An advanced course in corporation finance in which major topic areas such as capital budgeting, working capital management, leasing, mergers, and financing are examined in depth. Cases and readings and more complex problems are used to illustrate the concepts covered. *Prerequisite Business Administration 325.* Spring Semester.

466 Operations Management

3 credits. A critical study of decision-making techniques, emphasizing the practical application of scientific methods to production activities; topics include resource allocation, production cycle, work simplification, plant layout, and process control. *Prerequisite Business Administration 248, 369, Economics 102.* Spring semester.

467 Personnel Administration

3 credits. Analysis of the principles, concepts and practices of procurement, development, maintenance, and utilization of personnel in organizations. *Prerequisite Business Administration 265.* Spring semester.

468 Industrial and Labor Relations

3 credits. Analysis of employment relationships; union philosophy, structure and function; collective bargaining, and the interrelated interests of management, union, workers, and the community. *Prerequisite Business Administration 369 or permission of instructor.* Fall semester.

471 Internship in Business

Variable credit. Work experiences designed to supplement course work. Students gain valuable knowledge and experience not available from textbooks. *Prerequisite approval of Department Chairman.*

480-489 Independent Study

Variable credit. Designed to allow the student to do independent study and research on a problem or topic in the field of business. *Prerequisite approval of Department Chairman and Dean of the Faculty.*

495 Business Policy

3 credits. A capstone course for any business major, integrating concepts, principles, and practices from prior courses. Provides a comprehensive study of the interrelationships between management theory, problem analysis, and strategy formation for the contemporary enterprise. *Prerequisite senior status and permission of instructor.*

498 Seminar in Marketing

3 credits. Synthesizes the literature in consumer behavior, quantitative methods in marketing, and policy issues. *Prerequisite Business Administration 215 and permission of instructor.* Spring semester.

499 Seminar in Management

3 credits. Advanced study focusing on current management concepts and contemporary problems in the business enterprise. Various topics will be selected in the area of the students' interest. *Prerequisite Business Administration 248, 265, 369, and two other courses required for the management concentration; or permission of instructor.*

BUSINESS EDUCATION**101 Elementary Gregg Shorthand**

3 credits. Introduction to Gregg Shorthand Series 90; instruction in theory, and in reading and writing shorthand rapidly and accurately. For students with no training in shorthand. Fall semester.

201 Intermediate Gregg Shorthand

3 credits. An intensive study of Gregg Shorthand Series 90; emphasis upon developing the student's ability to take dictation on unfamiliar material rapidly, and to transcribe accurately at the typewriter. *Prerequisite Business Education 101, 111, or permission of instructor.* Spring semester.

301 Advanced Gregg Shorthand

3 credits. A thorough review of shorthand theory, dictation and transcription practices. Emphasis given to methods and materials used in teaching shorthand in the secondary school. Enrollment limited to business education students. *Prerequisite Business Education 201, 212; or permission of instructor.*

111 Elementary Typewriting

3 credits. Fundamental typewriting techniques: machine operation, keyboard technique, letter forms, tabulation, manuscript form. For students with no formal training on the typewriter. Fall semester.

212 Intermediate Typewriting

3 credits. A concentrated training on the typewriter; business letters, special communication forms, technical papers, business reports, tables, business forms, executive communications, and application forms. *Prerequisite Business Education 111 or permission of instructor.* Spring semester.

311 Advanced Typewriting

3 credits. The building of production-level skill with emphasis given to methods and materials used in teaching typewriting in the secondary school. Enrollment limited to business education students. *Prerequisite Business Education 212 or permission of instructor.*

221 Mathematics for Business

3 credits. Review of fundamental processes, with emphasis on accuracy and speed in computations. These skills are applied to problem solving in personal and business situations. Enrollment limited to business education and medical secretarial students. Spring semester.

223 Business Communications

3 credits. Effective and functional written and oral business communications. Enrollment limited to business education and medical secretarial students. Fall semester.

370-379 Special Problems

3 credits. A directed learning experience designed to allow students to explore current topics of special relevance in the field of business education.

421 Office Practice

3 credits. The study of methods and materials for teaching secretarial procedures and business machines. Enrollment limited to business education students. *Prerequisite Business Education 111 or permission of instructor.*

305 Practicum in Secondary Education: Business (Education 305)

4 credits. Instructional methodology of business education and in-school experience integrated under the guidance of a clinical professor representing the academic major. *Prerequisite Psychology 105; corequisite Education 225d.*

473 Professional Internship, Secondary (Education 473)

16 credits. Student teaching in a secondary classroom. *Prerequisite Education 305.*

480-489 Independent Study

Variable credit. Designed to allow the student to do independent study and research on a problem or topic in the field of business education. *Prerequisite approval of Department Chairman and the Dean of the Faculty.*

ECONOMICS**101 Principles of Economics I**

3 credits. (Core) The principles and problems of economics. Topics include supply and demand, the United States economic system, national income accounting, employment theory, fiscal policy, money and banking, and monetary policy. Does not fulfill Core requirement for students majoring in accounting, business administration or business education.

102 Principles of Economics II

3 credits. (Core) Continuation of 101. Topics include elasticity, consumer behavior, production costs, market structures (competition, oligopoly, monopoly), and resource pricing. Does not fulfill Core requirement for students majoring in accounting, business administration, or business education. *Prerequisite Economics 101 or permission of instructor.*

301 Intermediate Microeconomic Theory

3 credits. (Core) An in-depth study of corporate decision-making and resource allocation within the economic environment of free enterprise. *Prerequisite Economics 101, 102; Mathematics 121 or 117.* Spring semester.

302 Intermediate Macroeconomic Theory

3 credits. (Core) Development of macroeconomic theories of output, employment, inflation and growth, monetary and fiscal policies, and analysis. *Prerequisite Economics 101, 102; Mathematics 121 or 117.* Fall semester.

303 Money and Banking

3 credits. (Core) A study of the United States money and banking systems, including commercial banking, the Federal Reserve System, monetary theory and policy, interest rates, money markets. *Prerequisite Economics 101, 102; or permission of instructor.* Spring semester.

304 Public Finance

3 credits. (Core) An application of macroeconomic theory to the problems of federal, state, and local taxation, expenditures and debt management. *Prerequisite Economics 101.* Spring semester.

306 Development of Economic Thought

3 credits. (Core) The historical and philosophical evolution of economic ideas and schools of thought from Smith, Ricardo, and Marx to Marshall and Keynes. Fall, 1984.

307 International Economics

3 credits. (Core) A study of the basic concepts of international trade, international payments, and commercial policy, combining economic theory, policy, and practice. *Prerequisite Economics 101 or permission of instructor.* Fall, 1983.

308 Comparative Economic Systems

3 credits. (Core) Examination, criticism, and appraisal of alternative economic systems: capitalism, socialism, communism, and mixed economic systems. *Prerequisite Economics 101 or permission of instructor.* Fall, 1983.

309 Introduction to Mathematical Economics

3 credits. (Core) An application of algebra and elementary calculus to further elaborate economic concepts and problems. *Prerequisite Economics 101, 102; Mathematics 121 or 117.* Fall, 1984.

370-379 Special Problems

3 credits. (Core) A course designed to allow students to explore topics and problems of current relevance in economics.

480-489 Independent Study

Variable credit. (Core) Designed to allow the student to do independent study and research on a problem or topic in the field of economics. *Prerequisite approval of Department Chairman and Dean of the Faculty.*

HEALTH CARE**322 Health Laws, Issues, and Public Policies**

3 credits. An examination of important laws, issues, and public policies pertinent to health care, with attention to regulatory authority, liability and social policy. *Prerequisite permission of instructor.* Fall, 1983.

MEDICAL SECRETARIAL SCIENCE**101 Medical Office Procedures**

3 credits. Simulation approach to medical office procedures, office protocol, and the like. Enrollment limited to medical secretarial students. *Prerequisite Business Education 111, 223; or permission of instructor.* Spring semester.

109 Medical Accounting

3 credits. Examines standard record-keeping and bookkeeping for doctors and dentists; topics include financial statements and reports unique to the medical profession. Enrollment limited to medical secretarial students. Fall semester.

211 Medical Terminology

3 credits. Basic tools for building a medical vocabulary through acquaintance with medical terms in anatomy, physiology, and disease. Enrollment limited to medical secretarial students. Fall semester.

219 Medical Transcription

3 credits. Using Dictaphone equipment, the students transcribe a variety of medical records and histories. Enrollment limited to medical secretarial students. *Prerequisite Business Education 212, Medical Secretary 101; or permission of instructor.* Fall semester.

272 Practicum

6 credits. The student will be placed in a hospital, a doctor's office, a dentist's office, or some other health care facility for practical experience for a portion of the semester. It is the student's responsibility to provide transportation for the practicum.

BUSINESS ADMINISTRATION

See Department of Business, page 47.

BUSINESS EDUCATION

See *Department of Business*, page 47.

DEPARTMENT OF CHEMISTRY

Professors Hedrick, Proctor (*Director of the Medical Technology Program*), Ranck, Spangler
Associate Professors Reeder (*Chairman*), Schaeffer

Bachelor of Science

Professional Accreditation: The Elizabethtown College Chemistry Department is on the approved list of the American Chemical Society, Committee on Professional Training. The affiliation of Elizabethtown College with seven accredited hospitals is recorded with the National Accrediting Agency for Clinical Laboratory Sciences.

Chemistry programs contribute to both the liberal arts component and the professional component of that pragmatic mixture of studies that Elizabethtown College seeks to foster. Students may choose chemistry as part of their General Education Core requirements, as an elective, or as a major area of study leading to a career which requires an in-depth knowledge of chemistry.

Students majoring in chemistry typically go on to graduate studies in chemistry or biochemistry, to hospital or industrial laboratories, to the study of medicine, to secondary education, or to sales positions in the chemical industry.

The Department of Chemistry offers two programs, one in biochemistry and the other in chemistry with a choice of emphases.

The Bachelor of Science in Biochemistry prepares students for medical school or other health professions schools, graduate study in biochemistry and related fields, or employment that requires baccalaureate education. Premedical and other health professions programs are discussed on p. 88.

The Bachelor of Science in Chemistry offers five areas of emphasis: the American Chemical Society approved professional chemistry curriculum, the medical technology curriculum, and the secondary education certification, chemistry management, and chemical physics curricula. The American Chemical Society option prepares the student for graduate school or for a career in industrial or government laboratories. The secondary education curriculum prepares students for high school teaching, the chemistry management option is preparation for sales or management positions in chemical and related industries, and chemical physics is a foundation for work at the interface between chemistry and physics.

There are two options within the **medical technology program** offered in cooperation with hospital programs accredited by the American Medical Association's Committee on Allied Health and Accreditation (CAHEA). Most students choose the option requiring three years (100 semester hours) at Elizabethtown College plus a 12-month period of study at a hospital approved by the American Medical Association and Elizabethtown College. The degree is awarded upon the recommendation of the pathologist or program supervisor of the hospital and the program director of the College. Elizabethtown College is affiliated with Harrisburg Hospital, Polyclinic Hospital (Harrisburg), York Hospital, Lancaster General Hospital, St. Joseph Hospital (Lancaster), West Jersey Hospital (Voorhees, New Jersey), and Abington Hospital (Abington, Pennsylvania). The second option requires four years at Elizabethtown College followed by a clinical year, although the clinical year is not required for a degree from Elizabethtown College when this second option is chosen.

Additional options may be tailored to the student's needs in consultation with the student's adviser and the Department Chairman. Students planning much work in chemistry should consult with a departmental adviser as early as possible to plan the sequence of courses in chemistry, mathematics, physics, biology, and modern foreign language which will be to their greatest advantage. Many upper-level chemistry courses have calculus and physics courses as prerequisites, making their early completion desirable. The sequence in secondary education also requires early planning to insure proper spacing of education courses.

The biochemistry program requires Chemistry 113, 114, 213, 214, 242, 323, 323L, 324, 324L, 361-2, 363-4, 490, 491; Biology 111, 112, 324, 324L; 12 semester hours of additional biology and/or chemistry, 6 of which must be in biology; Computer Science 115; Mathematics 122, Physics 231; and Modern Language*.

The A.C.S. approved program requires Chemistry 113, 114, 213, 214, 242, 323, 323L, 324, 324L, 343, 344, 351, 352, 361-2, 363-4, 402, 421, 490, 491; Computer Science 115; Mathematics 222; Physics 231; Modern Language*.

The medical technology program requires Chemistry 113, 114, 213, 214, 361-2, 323, 323L, 324, 324L; 16 semester hours of biology which must include Biology 111, 112, 222, and 235; Computer Science 115; Mathematics 101 or 121, 151; and Physics 203. For students attending Elizabethtown for three years, these required courses plus general education core and electives must total 100 semester hours. The clinical year includes a minimum of 28 additional semester hours. For those attending Elizabethtown for four years, additional requirements are Chemistry 242, 363-4, 490, 491; Mathematics 122; Physics 204; and two additional courses in biology or chemistry.

The secondary education program requires Chemistry 113, 114, 213, 214, 242, 343, 351, 361-2, and one additional chemistry course; Computer Science 115; Mathematics 222; Physics 231; Modern Language*; Psychology 105; Education 305, 225d, 415, 225e, and 473. The department also participates in the general science certification program. For a detailed listing, see p. 99.

The chemistry management program requires Chemistry 113, 114, 213, 214, 242, 343, 351, 361-2, 363-4, and one additional chemistry course; Computer Science 115; Mathematics 222; Physics 231; Modern Language*; Accounting 107; Business Administration 215, 325, 332, 265, 369, 466; and Economics 101, 102.

The chemical physics program requires Chemistry 113, 114, 213, 214, 242, 343, 344, 351, 352, 361-2, 363-4, 490; Computer Science 115; Mathematics 222; Physics 232, 344; Modern Language*; and a minimum of seven semester hours from the following courses: Chemistry 402, 421, 491; Mathematics 362; Physics 404, 407, 408, 490.

*A chemistry or biochemistry student can fulfill the chemistry department modern language requirement in any one of the following ways:

- 1) Proving competence in a modern language at the 202 level by examination.
- 2) Satisfactory completion of a 202 level modern language course.
- 3) Satisfactory completion of a 102 level modern language course in a second language, not previously studied by the student.

For these purposes, a modern language is taken as one taught by the Department of Modern Languages at Elizabethtown College or specifically approved by the Department of Chemistry.

101 General Chemistry I

4 credits (Core). A general survey for students requiring only one year of chemistry. Hours: lecture 3, laboratory 3. Fall semester.

104 General Chemistry II

4 credits. (Core) A continuation of Chemistry 101. Hours: lecture 3, laboratory 3. Prerequisite Chemistry 101. Spring Semester.

113 Organic Chemistry I

4 credits. (Core) The introductory course for those students who require more than one year of chemistry. A study of stoichiometry, bonding, geometry, equilibrium, kinetics and instrumentation applied to carbon compounds. Hours: lecture 3, laboratory 3. Prerequisite high school chemistry and algebra or equivalent. [Only 2 credits will be awarded for Ch 113 for those students who have satisfactorily completed Ch 104.] Fall semester.

114 Organic Chemistry II

4 credits. (Core) A continuation of Chemistry 113 emphasizing synthesis and reaction mechanisms. Hours: lecture 3, laboratory 3. Prerequisite Chemistry 113. Spring semester.

116 Selected Topics in Organic Chemistry

1 credit. Selected exercises for students desiring additional experience in organic chemistry laboratory. Hours: laboratory 3. Pre or corequisite Chemistry 114 and permission of instructor. Spring semester.

213 Analytical Chemistry I

4 credits. (Core) An introduction to quantitative analysis integrating classical and instrumental methods. Hours: lecture 2, laboratory 6. Prerequisite Chemistry 114. Fall semester.

214 Analytical Chemistry II

4 credits. (Core) A continuation of Chemistry 213 with added emphasis on instrumental methods and computer systems interfacing. Hours: lecture 2, laboratory 6. Prerequisite Chemistry 213. Spring semester.

242 Chemical Equilibrium and Kinetics

3 credits. (Core) An introduction to thermodynamics as applied to chemical equilibria in ideal and non ideal, homogeneous and heterogeneous systems. Kinetics, ionic solutions, and electrochemistry are also treated. Pre or corequisite Chemistry 214, Mathematics 122, Physics 204 or 231. Spring semester.

323 Biochemistry I

3 credits. (Core) An introduction to the chemistry of living matter treating the structures, metabolism, and functions of proteins, lipids, carbohydrates, and nucleic acids. Prerequisite Chemistry 213 and Biology 112 or equivalent. Fall semester.

323L Biochemistry I Laboratory

1 credit. (Core) An introduction to techniques used in experimental investigations in biochemistry. Hours: laboratory 4. Corequisite Chemistry 323. Fall semester.

324 Biochemistry II

3 credits. (Core) A continuation of Chemistry 323. Prerequisite Chemistry 323. Spring semester.

324L Biochemistry II Laboratory

1 credit. (Core) A continuation of Chemistry 323L. Hours: Laboratory 4. Prerequisite Chemistry 323L, corequisite Chemistry 324. Spring semester.

333 Computer Systems Interfacing (Computer Science 333, Physics 333)

3 credits. Digital logic and integrated circuits to implement logic; architecture and machine language, programming minicomputers and microprocessors; design, testing, and construction of instrument-to-computer and computer-to-computer interfaces; design and testing of supporting software. Hours: lecture 1, laboratory 6. Fall semester.

343 Introduction to Quantum Theory (Physics 343)

3 credits. (Core) An introduction to the history and principles of quantum theory, radiation atomic spectra, and the extranuclear structure of the atom. Prerequisite Chemistry 242. Fall semester.

344 Molecular Structure and Mechanics

3 credits. (Core) An extension of quantum theory to molecules and condensed states of matter. Includes principles of optical and magnetic resonance spectroscopy for molecular structure determination and statistical mechanics as a basis for chemical equilibrium and reactivity. Prerequisite Chemistry 343. Spring semester.

351 Advanced Chemistry Laboratory I

4 credits. (Core) Designed primarily to acquaint the student with synthetic methods in chemistry as well as product purification and identification. Hours: lecture 2, laboratory 8. Prerequisite Chemistry 242. Fall semester.

352 Advanced Chemistry Laboratory II

2 credits. (Core) Problems and experiments in the determination of molecular structure. Hours: laboratory 6. Corequisite Chemistry 344. Spring semester.

361,-2 Chemistry Seminar I, II

1 credit. A two semester sequence in which the student must present a minimum of one seminar and regularly attend those presented by other students. Student must enroll in both courses to receive credit which is given upon completion of 362. Hours: seminar 1. Fall semester, Spring Semester.

363,-4 Chemistry Seminar III, IV

1 credit. A two-semester sequence in which the student must present a minimum of one seminar and regularly attend those presented by other students. The student must enroll in both courses to receive credit which is given upon completion of 364. Hours: seminar 1. Fall semester, Spring semester.

370-379 Special Topics in Chemistry

Variable credit. (Core) Study of an advanced topic, experimental or theoretical, of interest to the student. Prerequisite permission of instructor and Department Chairman.

402 Advanced Inorganic Chemistry

3 credits. (Core) A study of the elements and their compounds based upon atomic and molecular structure. Prerequisite Chemistry 344. Spring semester.

421 Advanced Organic Chemistry

3 credits. (Core) A study of organic reactions based on experimental and advanced theoretical studies. Prerequisite Chemistry 344. Fall semester.

460-469 Clinical Courses in Medical Technology

28 credits (minimum). Instruction during the clinical year includes the following courses.

Clinical Microbiology—Identification and clinical pathology of bacteria, fungi, viruses and parasites. Techniques to isolate, stain, culture and determine antimicrobial susceptibility. Instrumentation; quality control.

Clinical Chemistry—Enzymology, endocrinology, biochemistry of lipids, carbohydrates and proteins, metabolism of nitrogenous end products, physiology and metabolism of fluids and electrolytes, and toxicology as related to the body and diseases. The technical procedures include colorimetry, spectrophotometry, electrophoresis, chromatography, automation and quality control.

Clinical Hematology/Coagulation—The composition and function of blood; diseases related to blood disorders; the role of platelets and coagulation. Manual and automated techniques of diagnostic tests for abnormalities.

Clinical Immunohematology—Blood antigens, antibodies, crossmatching, hemolytic diseases, and related diagnostic tests. An in-depth study of blood donor service and its many facets such as transfusions, medico-legal aspects, etc.

Clinical Immunology/Serology—Immune response, immunoglobulins, autoimmunity and complement and related tests and diseases. Survey and demonstration of serological diagnostic tests.

Clinical Seminar—Other courses which are not included in the above (such as orientation, laboratory management, education, clinical microscopy) and/or are unique to the individual hospital program.

Prerequisite admission to the medical technology school of the cooperating hospital.

490-495 Research in Chemistry

Variable credit. (Core) An original experiment or theoretical investigation under the close supervision of a faculty member. Experimental design and a written report are required. Prerequisite permission of instructor.

Education 305 Practicum in Secondary Education: Science

3 credits. Teaching science in secondary schools. Prerequisite Psychology 105; corequisite Education 225d.

DEPARTMENT OF COMMUNICATION ARTS

Professor Riley

Associate Professors Moore (*Chairman*), Smith

Bachelor of Arts

The Communication Arts Department offers courses in broadcasting, journalism, and speech with the aim of assisting students to develop their ability to communicate effectively in a democratic society and to build meaningful and productive lives on personal, interpersonal, and public levels. Career possibilities include positions in advertising, sales, public relations, business and industrial communications, broadcasting, newspaper and magazine writing, and reporting. The Department offers college-wide activities, including play production, speech activities, and radio broadcasting with WWEC, the campus radio station. All majors are expected to participate actively in the various extra-curricular activities sponsored by the Department.

The 45 credit hours required for a Bachelor of Arts in Communication Arts include Communication Arts 102 (for a total of 3 credit hours), 107, 108, 167, 206 or 208, 231, 241, 243, 244, 332, 441, plus 12 elective hours within the major. A major is permitted to count no more than 57 hours in communication arts towards graduation requirements. No theatre courses may count towards the major.

Every major must observe the following requirements: Students are required to maintain an overall 2.0 G.P.A. in the major. Students may not count a course towards requirements of the major and also towards requirements for the General Education Core: one course may fulfill only one requirement.

102 Applied Broadcasting

½ credit. Students are assigned work in the various departments of the campus radio station WWEC under supervision of its General Manager. May be repeated up to 4 credits. Majors only. Graded pass, no pass.

105 Basic Speech

3 credits. Basic instruction in developing poise and confidence in speaking, with emphasis on the speaker's personality, voice, diction, and body movement; fundamentals of speech preparation. Spring semester.

107 Communication Theory and Research

3 credits. A study of communication theory, research methods, and message organization. Required as the first communication arts course for all freshman declared majors. Fall semester.

108 Voice and Articulation

3 credits. A course treating the physiological and psychological aspects of speech production, including an analysis of acceptable standards of voice quality, articulation, and pronunciation. Spring semester.

168 Oral Interpretation

3 credits. (Core) The theory and practice of communicating prose and poetry to the listener through vocal and bodily techniques, tone, point-of-view, rhythm, and pace. Fall semester.

206 Persuasion

3 credits. A study of the theory and techniques of persuasion from the perspective of the persuader and of his audience, topics include the ethics, social responsibility, and motivation of persuasion; the techniques of nonverbal communication and mass appeals. *Prerequisite* Communication Arts 105 or permission of instructor. Spring semester.

208 Interpersonal Communications

3 credits. A study of the theory and application of interpersonal communication on the personal, educational, and organizational levels. *Prerequisite* Communication Arts 107 or permission of instructor. Spring semester.

231 Basic Reporting and Newswriting

3 credits. An introductory study of news media and values, with emphasis on effective reporting through the analysis of writing and news stories. *Prerequisite* Business Education 111, or a knowledge of typing, or permission of instructor. Fall semester.

234 Photojournalism

3 credits. Designed to provide experiential learning in the areas of documentary and emotional photography. Analysis of the works of photographers to provide a basis for developing techniques of communication. Includes camera and darkroom techniques. Students will be required to pay a laboratory fee. *Prerequisite* Communication Arts 231. Spring semester.

241 Introduction to Television Production

3 credits. An introduction to the production equipment and graphic techniques utilized in television. *Prerequisite* for majors Communication Arts 107. Fall semester.

243 Broadcast News

3 credits. An examination of the methods used by radio and television reporters to analyze and write the news. *Prerequisite* for majors Communication Arts 107. Fall semester.

244 Broadcast Copy

3 credits. An introductory study of the varied kinds of on-air copywriting within the radio and television industries. *Prerequisite* for majors Communication Arts 107.

332 Feature Writing

3 credits. Concentrates on soft news, background stories, human interest, humor columns, editorials, magazine writing, radio and television features. *Prerequisite* for majors Communication Arts 231.

334 Editing and Layout

3 credits. Students, working in teams, will develop a printed piece from concept through copy preparation, layout, mechanics, proofreading, printing, and distribution. The course emphasizes editing copy, learning to write headlines and captions, using art and photography, and learning to work within budgets and deadlines. *Prerequisite* Communication Arts 231 and 232, or permission of instructor.

339 Public Relations

3 credits. What public relations is, how and when it is used, how to express points of view, how to set ideas and concepts to audiences. *Prerequisite* Communication Arts 231 or permission of instructor.

341 Radio Production

3 credits. An advanced look at the techniques used to produce radio commercials, news, documentaries, and so forth. *Prerequisite* at least 1 full credit in Communication Arts 102; and 243, 244.

342 Television Production

3 credits. An advanced look at the techniques used to produce television commercials, news, documentaries, and so forth. *Prerequisite* Communication Arts 241, 243, 244. Spring semester.

370-379 Special Problems / Seminars in Communication Arts

Variable credit. A course designed to allow the student to pursue topics of special relevance.

441 Issues in Broadcasting

3 credits. A seminar examining the history of broadcasting, broadcast programming practices, and current relevant issues confronting the media. *Prerequisite* permission of instructor and, for majors, junior or senior status. Fall semester.

442 Communication Law

3 credits. A seminar examining the history and current standing of the laws affecting broadcasters and journalists. *Prerequisite permission of instructor and, for majors, junior or senior status.* Spring semester.

470-479 Practicum and Internship

Variable credit. Instruction on an individual basis for credit from the communication arts faculty or other qualified professionals in the student's chosen field: speech, theatre, broadcasting, or journalism. *Prerequisite permission of the Chairman of the Department.*

480-489 Independent Study in Communication Arts

Variable credit. Designed to give a student the opportunity to work in an area of major interest under the guidance of members of the communication arts faculty. *Prerequisite permission of instructor.*

THEATRE**151 Invitation to the Theatre**

3 credits. (Core) Theatre as a social experience—its people, its genre, and its current role in our society. Trips to area productions, paid for by students, will be an essential part of the course. Fall semester.

252 Theatre History

3 credits. (Core) The development of Western and American theatre with emphasis on plays, playwrights, actors, and theatre designers. Spring semester.

257 Stagecraft and Lighting

3 credits. (Core) The technique and theory of staging and lighting a theatre production; topics include set construction and current lighting effects. Course may be offered either semester, depending upon departmental needs.

268 Basic Acting

3 credits. (Core) Theory and practice in current acting methods. Students will be expected to participate in a number of class projects involving the memorization of parts.

DEPARTMENT OF COMPUTER SCIENCE

Professors Ranck, Shubert
Associate Professor Zugarek
Assistant Professors Cannon, Leap
(*Chairman*), Tulley

Bachelor of Science

The advent of high-speed machines with enormous capacity for the gathering, processing, storage, retrieval, and communication of information has affected nearly every aspect of our professions and our daily lives. Courses in computer science encourage the exploration and understanding of this social and technological phenomenon at several levels. Survey courses are provided for those who wish to understand in broad social contexts the nature of the computer and its effect on our lives and on society. Programming and language courses are provided for those who need to become skillful users of the computer. Advanced study in theory, hardware, software, and applications is provided for those who want to use the computer effectively and knowledgeably in another discipline. Advanced courses are designed to relate closely to the curricula in business, the natural and social sciences, engineering, and mathematics, and students are encouraged to develop simultaneous strengths in computing and in a discipline in which the computer is used as a tool. The department offers two programs, one in computer science, the other in computer science/business information systems. Both programs provide a strong curriculum from which either a professional career may be launched, or a graduate program pursued.

The College's main computing facility is housed in Nicarry Hall and consists of two computer systems, a DECsystem 10 and a DEC VAX 11/750. The DECsystem 10 is a time sharing computer with 256,000 words of main memory (1.25 megabytes), 175 megabytes of on-line disk storage, two magnetic tape drives, a 1200 line per minute line printer. The VAX 11/750 computer system includes two megabytes of main memory, 131 megabytes of on-line disk storage, a data cartridge drive, two remote printers in student terminal sites, a Calcomp graphics plotter (model 1012), 36 student terminals (25 with 24-hour access 7-days-a-week), three graphics terminals (two with light pens). Both computers have 48 terminal ports. The VAX computer is dedicated to academic use and the two computer systems are

connected in a network configuration permitting academic users "virtual terminal" type access to the DECsystem10. Major software systems available on the computers include most major computer languages (BASIC, Pascal, COBOL, FORTRAN, RPG, ALGOL, and assembly language), many specialized languages (SPSS, BLISS, GASP, GNOSIS, MODULA, FOCAL, PILOT, AID, and SAIL), both a CODASYL and a relational Data Base Management Systems, an interactive graphics package (PLOT-10), text editors (SOS, TECO and EDT, video display editor), text processing software (RUNOFF). All students enrolled in courses requiring use of the computer are assigned individual on-line storage space.

In addition to the main computer facility the Computer Science Department has two Z-80 micro computers and a DEC Professional Series 350 personal computer system. Also, there is a mini/micro computer laboratory housed in Gible Science Hall. This laboratory is equipped with a PDP-8 minicomputer system, LSI-11 and INTEL-8080 micro computers, a Vector Graphics Z-80 microcomputer system with two floppy disk drives and an INTEL PROMPT-48 microprocessor development system. The Physics department also has a PDP-8 minicomputer system used for real-time data collection and interactive data analysis applications.

All computer science and computer science/business information systems majors are required to take a minimum of 39 hours in computer science courses including Computer Science 125, 145, 221, 222, 332, 341, and 490.

The computer science major is further required to take Computer Science 231, 232, 322; Mathematics 121, 122, 151, 201, and one course chosen from 172, 222, 252; and an area elective which includes four courses in one area other than computer science; these courses may not be chosen from among those required for computer science or for Core, and must be approved by the computer science faculty advisor.

The computer science/business information systems major is further required to take Computer Science 135, 309, 340, 409, Mathematics 117, 151, and 172; Accounting 107, 108; Business Administration 215, 265, 325; Economics 101, 102.

115 Introduction to Scientific Computing

3 credits. An introduction to the use of computers for scientific applications. Topics include algorithmic problem-solving techniques, syntax of the

FORTRAN and BASIC languages, and the use of subprograms, file handling and data representation. (Students who have passed computer science 145 will receive one credit for this course.)

125 Introduction to Computer Processing

3 credits. An overview of computer concepts and uses. Discussion of computer history, systems and equipment, hardware and software organization and operation. Computer programming and the BASIC language are studied.

135 Introduction to Business Computing

3 credits. An introduction to the application of the computer in a business environment. Topics include the structure of data, sequential file processing, table organization and processing, design and debugging techniques using COBOL. *Prerequisite* Computer Science 125.

145 Program Structures

3 credits. A study of program control structures and algorithms using PASCAL. Topics include procedures, recursion, program organization, structured programming, and elementary data structures. *Prerequisite* Computer Science 115 or 125.

221 Algorithms and Data Structures

3 credits. Methods for structuring data and the algorithms for handling them are developed. Topics include data types, aggregates, stacks, queues, linked lists, trees, string processing, sorting and searching and data management. *Prerequisite* Computer Science 145. Fall semester.

222 Assembly Language Programming

3 credits. Introduction to programming at the machine and assembly level including the relation to computer organization and the operating system interface. Topics include absolute and relocatable coding, program segmentation and code sharing, program linkage and loading, assembler operation, and macros. *Prerequisite* Computer Science 221. Spring semester.

231 Discrete Structures (Mathematics 231)

3 credits. Topics in discrete mathematics as they apply to computer science including sets, relations, graphs and trees, Boolean algebras, groups and fields. *Prerequisite* Mathematics 151. Fall, alternate years.

232 Formal Languages

3 credits. The theoretical and practical analysis of the syntax of programming languages. Topics include the concepts and terminology associated with grammars, graph searching, parsing by recursive descent, and the theory of error repair and recovery. *Prerequisite* Computer Science 221, 231. Spring, alternate years.

309 Programming Business Applications

3 credits. An advanced study of the COBOL language and a study of the concepts and techniques of sorting and searching, report generation, file processing, and structuring data in files including random and ISAM files. Projects relating to programming in business will be assigned. *Prerequisite Computer Science 135.* Spring semester.

322 System Software Design

3 credits. Design and construction of system software such as text editors, compilers and assemblers. Topics include command and statement parsing techniques, symbol tables, code generation, code optimization. A project involving design and construction of a working systems program will be assigned. *Prerequisite Computer Science 222, 232.* Fall, alternate years.

332 Computer Organization

3 credits. Introduction to Boolean algebra, logic circuit and design, and their use in computer architecture. Basic parts of computer systems are studied including storage, control and input/output systems. *Prerequisite Computer Science 222.* Fall, alternate years.

333 Computer Systems Interfacing (Chemistry 333, Physics 333)

3 credits. Digital logic and integrated circuits to implement logic; architecture and machine language programming of mini-computers and microprocessors; design, testing, and construction of instrument-to-computer and computer-to-instrument interfaces; design and testing of supporting software.

340 Business Information Systems

3 credits. A study of information systems from the user's point of view intended to give the potential manager an appreciation for the information requirements of an organization as well as the manager's role in the design of such systems. Topics include information and systems theory; the relationship between management, systems, and information; systems design; and an investigation of information systems of the various functional areas within the organization. *Prerequisite Computer Science 125, Business Administration 215, 265.* Spring semester.

341 Systems Analysis and Design

3 credits. Analysis and design of computer-based and manual systems, including a study of information requirements, design approaches, processing methods, and data management systems. *Prerequisite Computer Science 125 and either 135 or 145.* Fall semester.

370-379 Special Topics

3 credits. A course designed to allow students to explore topics and problems of current relevance in computer science. *Prerequisite permission of instructor.*

409 Data Base and Information Systems

3 credits. A study of information systems design and data base management techniques. Topics include information retrieval theory, data base design, data models, maintenance, file security, data reliability, CODASYL recommendations on DBMS. *Prerequisite Computer Science 221, 309.* Fall, alternate years.

413 Systems Simulation

3 credits. Fundamentals of modeling, stochastic processes, statistical measures of validity, and queuing theory. Applications will be programmed in higher-level languages as well as a specialized simulation language. *Prerequisite Computer Science 145; Mathematics 151; or permission of instructor.* Spring, alternate years.

422 Operating System Design and Principles

3 credits. An examination of the principles and theories behind the design of operating systems as well as their practical implementation. Topics include executives and monitors, task handlers, scheduling algorithms, file handlers, theories of resource allocation and sharing, multiprocessing and interprocess communication. *Prerequisite Computer Science 322, 332.* Fall, alternate years.

471 Internship in Computer Science

Variable credit. Work experience designed to supplement course work. By working for business, school, or government, the student gains valuable knowledge unavailable from textbooks. *Prerequisite approval of computer science faculty.*

480-489 Independent Study

Variable credit. Designed to allow the student to do independent study and research on a problem or topic in the field of computer science. *Prerequisite approval of computer science faculty and Dean of the Faculty.*

490-491 Readings and Projects in Computer Science

1-4 credits. A directed project or study requiring faculty acceptance of a proposal and a final report and defence of work. *Prerequisite junior or senior status and permission of instructor.*

DEPARTMENT OF EDUCATION

Professors Rice, Ziegler (*Chairman*),
Associate Professors Bowers, Callenbach, Fox
Assistant Professor Gaver

Bachelor of Science

The Department offers three major certification programs—Early Childhood (N–3), Elementary, (K–6), and Secondary (7–12)—which seek to combine a strong liberal arts education with the development of high professional competence. Complementing the General Education Core and, in secondary certification, the student's academic major, the certification programs bring together in a creative way the student, the school, and the subject to be taught. The Department further stresses the importance of supervised field experiences which complement on-campus courses in education.

Encompassing the education of the child from birth to eight years of age, the early childhood program prepares individuals to teach in nursery school, daycare, kindergarten, and grades 1–3 in both public and private schools.

ADMISSION TO TEACHER EDUCATION PROGRAM

All applicants who plan to teach must, by the time they have completed Education 205 or 305, file a written application for admission to the Teacher Education Program and meet the qualifying criteria of the Department of Education: proficiency in English and speech, good physical and mental health, a grade point average of at least 2.0, approval of the Office of Student Affairs, satisfactory evaluation and recommendation by the members of the Department of Education, approval by the major department of prospective secondary school majors, Educational Testing Service National Teacher Exam (ETS/NTE) Core Battery Tests of Communication Skills and General Knowledge (effective 1983–84).

Note: Students who fail to meet these criteria as applicants, or who later fail to maintain satisfactory progress, are counseled out of the program and directed into other areas of endeavor

PROGRESS TOWARD PROGRAM COMPLETION

1. Students are evaluated at the conclusion of each semester after admission into the program, and may be advised to withdraw at any time the Department determines that withdrawal is in the best interests of the College, the program, and the student.
2. Any grade below C in the teaching major after completion of the 100-level courses will disqualify a student from certification.

3. Students should apply for certification during the semester in which they will graduate. Should they apply after they have graduated, they must satisfactorily complete whatever additional requirements are in effect before they can receive certification.

CERTIFICATION PROGRAM REQUIREMENTS

The Secondary Certification Program (accompanied by the bachelor of art or bachelor of science degree, depending on the student's academic major):

- A. General Education Core as detailed by the College.
- B. Academic major as outlined by each program area which supports a certification program: business education, English, mathematics, science and general science, social studies.
- C. Professional education requirements: Education 305, 225d, 415, 225e, 473.
- D. ETS/NTE Test of Professional Knowledge (effective with the Class of 1986).

The Elementary Education Major (bachelor of science degree):

- A. General Education Core as detailed by the College. Psychology 225 must be taken as part of the social science Core requirement.
- B. Professional education requirements: Education 205, 225a–c, 235, 325, 335, 355, 365, 472, 490–498 (6 credits); Mathematics 211, 212; Psychology 225; Physical Education 285; Music 325, 326.
- C. Electives

The Early Childhood Education Major (bachelor of science degree):

- A. General Education Core as detailed by the College. Psychology 225 must be selected as part of the social science Core requirement.
- B. Professional education requirements: Education 205, 225a–c, 235, 315, 320, 325, 335, 355, 365, 471, 490–498 (6 credits); Mathematics 211, 212; Psychology 225; Physical Education 285; Music 325, 326.
- C. Electives

205 Foundations of Education

4 credits. A study of some of the historical, philosophical, sociological, and psychological foundations of education. *Prerequisite Psychology 105.*

Note: Admission to the Teacher Education Program is a prerequisite to any other education course.

225 a–e Education Practicum

Variable credit. Provides instruction in media, and experience in the preschool, elementary, or secondary classroom. The practicum and its corequisite courses integrate classroom experience with on-campus study.

235 Fundamentals of Reading Instruction

3 credits. An introduction to the systematic assessment and teaching of the basic reading skills: word recognition, word analysis, and comprehension skills. *Prerequisite* 205; *corequisite* Education 225b.

305 Practicum in Secondary Education

4 credits. The instructional methodology of an academic discipline is integrated with in-school experience under the guidance of a clinical professor in the academic major: business education, English, mathematics, science and general science, social studies. *Prerequisite* Psychology 105; *corequisite* Education 225d

310 History of Science

1 credit. A study of developments in science from the ancient Greeks to the twentieth century. *Prerequisite* permission of instructor.

315 Early Childhood Education

4 credits. A study of programs from preschool through grade 3, emphasizing the setting, the child, and the special needs and approaches of early childhood education. On-campus study is coordinated with the experiences of observing and participating in early childhood settings. *Prerequisite* Education 235, Psychology 225. Fall semester.

320 Special Methods in Early Childhood Education

4 credits. Integrates early childhood materials and methods into the framework of the pre-operational child. *Prerequisite* Education 315; *corequisite* Education 325, 335, 355, 365. Spring semester.

325 Science for Early Childhood/Science for Elementary Education

3 and 4 credits, respectively. A study of science concepts, procedures, and materials for the preschool and elementary child. *Prerequisite* Education 315 (early childhood); 235 (elementary); *corequisite* Education 225C.

335 Mathematics for Early Childhood/Mathematics for Elementary Education

3 and 4 credits, respectively. A study of mathematics concepts, procedures, and materials for the preschool and elementary child. *Prerequisite* Education 315 (early childhood); 235 (elementary); *corequisite* Education 225C.

355 Language Arts and Reading for Early Childhood/Language Arts and Reading for Elementary Education

3 and 4 credits, respectively. A study of concepts, procedures, and materials in language arts and

reading for the preschool and elementary child. *Prerequisite* Education 315 (early childhood); 235 (elementary); *corequisite* Education 225C.

365 Social Studies for Early Childhood/Social Studies for Elementary Education

3 and 4 credits, respectively. A study of social studies concepts, procedures, and materials for the preschool and elementary child. *Prerequisite* Education 315 (early childhood); 235 (elementary); *corequisite* Education 225C.

371-380 Special Problems in Education

Variable credit. Topics chosen in response to student and faculty interests. *Prerequisite* permission of instructor.

415 Topics in Secondary Education

4 credits. Theory and practice of secondary education. Includes study of human development, interrelationships of individuals and groups, and other topics selected in response to standards for certification and other needs of the prospective secondary education teacher. *Prerequisite* Education 305; *corequisite* Education 225e.

471 Professional Internship, Early Childhood

16 credits. Student teaching in an early childhood classroom. *Prerequisite* Education 320, 325, 335, 355, 365.

472 Professional Internship, Elementary Education

16 credits. Student teaching in an elementary classroom. *Prerequisite* Education 325, 335, 355, 365.

473 Professional Internship, Secondary

12 credits. Student teaching in a secondary classroom. *Prerequisite* Education 305; *corequisite* Education 415

480-489 Independent Study

Variable credit. Upon the initiative of the student, a program of study may be organized with a faculty member on a topic of mutual interest.

490-498 Special Topics

Variable credit. Courses designed to give students opportunity to pursue work in an area of major interest in such topics as art in the elementary school, creativity, computers in education, children's literature, developmental reading.

DEPARTMENT OF ENGLISH

Professors Campbell, Dwyer
 Associate Professors Black, Russell
 (*Chairperson*)
 Assistant Professors Huber, Rohrkemper,
 Sarracino
Bachelor of Arts

The Department of English offers an education which stresses both the knowledge and effective use of language and an understanding and appreciation of our literary heritage. Excellence in both writing and literary studies is the fundamental aim of the General Education courses and of the rigorous and comprehensive program which prepares majors for graduate training in English or professions such as law and medicine, for teaching at the secondary level, or for the many careers which recognize the necessity for a sensitivity to language and its effective use.

The Department offers a major in English with the additional option of certification for the teaching of English at the secondary school level. English majors are required to take English 105, 241, 242, 394; two semesters of American literature; one course in literary forms (all English courses with the middle digit 1); two courses in literary movements (all English courses with the middle digit 2); one course in individual authors (all English courses, except English 339, with the middle digit 3); and an additional 12 hours of electives in English (excluding English 101 and 102).

Students wishing to be certified to teach English on the secondary level have these additional requirements: English 102 (which counts toward the English elective hours for certification candidates only), 383 and 344; Psychology 105; Education 305, 225d, 415, 225e, and 473.

101 Basic English (Developmental Studies 101)

3 credits. A study of the basic skills of writing (grammar, usage, mechanics) with emphasis upon paragraphing.

102 Expository Writing

3 credits. A course in the principles of writing in expository and persuasive discourse, including a short research paper.

105 Introduction to Literature

3 credits. (Core) A study of the different genres of literature, intended to develop the ability to analyze, evaluate, and appreciate literature, and to provide the necessary background for upper-level literature courses. Readings are drawn from major authors such as Homer and Shakespeare. Prerequisite to all literature courses. *Prerequisite English 102 or exemption from it.*

213 Analysis of Poems

3 credits. (Core) Intensive training in reading the individual poem accurately and sensitively. *Prerequisite English 105.* Fall, alternate years.

241 Literary History of Britain I

3 credits. (Core) A survey of the development of British literature from Old English poetry through Milton. Required for majors. *Prerequisite English 105; permission of instructor for non-majors.* Fall semester.

242 Literary History of Britain II

3 credits. (Core) A survey of British literature from the Restoration to World War II with emphasis on the neoclassic, Romantic, and Victorian periods. Required for majors. *Prerequisite English 105; permission of instructor for non-majors.* Spring semester.

312 English Drama Before 1900

3 credits. (Core) A study of representative English plays, excluding Shakespeare, from the Middle Ages to the twentieth century, emphasizing Elizabethan and Jacobean drama. *Prerequisite English 105.* Fall, alternate years.

313 Modern Drama

3 credits. (Core) A study of drama from the realism of Ibsen through naturalism, expressionism, and symbolism to the current "avant garde" theatre. *Prerequisite English 105.* Spring semester.

314 The English Novel Before 1900

3 credits. (Core) A study of selected masterpieces from Defoe to Hardy as works of prose art and as turning points in the development of the form. *Prerequisite English 105.* Fall, alternate years.

317 Modern Novel

3 credits. (Core) A study of the work of major novelists of the twentieth century with emphasis upon the development of the novel as an art form. *Prerequisite English 105.* Fall semester.

318 Modern Poetry

3 credits. (Core) A study of at least 3 major twentieth-century poets as well as selections from writers who have published within the last 30 years. *Prerequisite English 105.* Spring semester.

320 Concepts of the Renaissance

3 credits. (Core) A study of the "ruling ideas" of the Renaissance in Britain; representative non-dramatic writers with an emphasis on Spenser. *Prerequisite English 105.* Spring, alternate years.

322 The Seventeenth Century

3 credits. (Core) A study of the major non-dramatic writers, excluding Milton, from 1600 to 1660; among them, Donne, Jonson, Herbert, and selected prose writers. *Prerequisite English 105.* Fall, alternate years.

323 The Restoration and Eighteenth Century

3 credits. (Core) A study of poetry and prose from 1660 to 1800 with an emphasis on Dryden, Swift, Pope, Sterne, and Johnson. *Prerequisite English 105.* Fall, alternate years.

327 The Romantic Movement

3 credits. (Core) A study of selected poetry and prose most significantly embodying the central concepts and achievements of English Romanticism. *Prerequisite English 105.* Fall, alternate years.

328 The Victorian Period

3 credits. (Core) A study of selected poetry and prose from Tennyson to Hardy particularly emphasizing the changing responses of the artist to the conflicts stemming from the industrialization of the period. *Prerequisite English 105.* Spring, alternate years.

331 Chaucer

3 credits. (Core) A study of representative works of Chaucer. *Prerequisite English 105.* Fall, alternate years.

332 Shakespeare

3 credits. (Core) A study of representative works of Shakespeare. *Prerequisite English 105.* Spring semester.

333 Milton

3 credits. (Core) A study of representative works of Milton. *Prerequisite English 105.* Spring, alternate years.

337 Eighteenth-Century English Authors

3 credits. (Core) A study of representative works of one or two major authors such as Pope, Swift, Fielding, and Goldsmith. *Prerequisite English 105.* Fall, alternate years.

338 Nineteenth-Century English Authors

3 credits. (Core) A study of representative works of one or two major authors such as Blake, Keats, Dickens, and Hardy. *Prerequisite English 105.* Fall, alternate years.

339 American Authors

3 credits. (Core) A study of the writings of one or two American authors such as Melville, James, Whitman, and Faulkner. Satisfies American literature rather than major author requirement for English majors. *Prerequisite English 105.* Spring, alternate years.

340 The American Romantic Movement

3 credits. (Core) A study of American Transcendentalism, including its sources, and of major figures of the period such as Hawthorne, Melville, Whitman, Emerson, and Thoreau. *Prerequisite English 105.* Fall, alternate years.

341 The Rise of Realism in American Literature

3 credits. (Core) A study of American literature in the late nineteenth and early twentieth centuries with emphasis on such writers as Dickinson, Clemens, Robinson, Frost, Dreiser, and Fitzgerald. *Prerequisite English 105.* Spring, alternate years.

342 Experimentalism in American Literature

3 credits. (Core) A survey of major American writers of the last 50 years, authors such as Pound, Eliot, Faulkner, Williams, Stevens, Jeffers, Moore, and Nabokov. *Prerequisite English 105.* Fall, alternate years.

344 Methods Seminar in Teaching Language and Composition

3 credits. The teaching of English grammar and usage, with reference to teaching composition at the secondary school level; practical application of various methodologies through tutoring internships in the Writing Laboratory. *Prerequisite to professional semester.* Spring semester.

352 Fantasy in Literature

3 credits. (Core) A study of major works of fantasy (*Alice in Wonderland*, *The Hobbit*, *The Golden Key*, and others) focusing on the thematic significance of "the journey." *Prerequisite English 105.* Spring, alternate years.

357 Women and Literature

3 credits. (Core) A study of the effects on women writers and readers of a male-dominated literary tradition. *Prerequisite English 105.* Fall, alternate years.

370-379 Special Problems

3 credits. Courses involving specific subjects chosen in response to student-faculty interest. *Prerequisite English 105.*

381 Creative Writing (Poetry, Prose)

3 credits. A course for the writing of original poetry or prose, or both, and developing an understanding of the craftsmanship involved. Graded pass, no-pass. *Prerequisite permission of instructor.* Fall semester.

383 Advanced Composition

3 credits. An analysis of language to refine the student's resources in becoming a sophisticated writer, research methods, critical analysis, and extensive writing. *Prerequisite permission of instructor.* Spring semester.

394 English Seminar

3 credits. A seminar for English majors on the history of literary criticism including research techniques and a research project. Required for majors. *Prerequisite English 105; permission of instructor for non-majors.* Spring, alternate years.

480-489 Independent Studies in English

2-3 credits. A course designed to give the individual student the opportunity to pursue work in an area of major interest under the guidance of a member of the Department of English. See the Department Chairman for registration instructions.

Education 305 Practicum in Secondary Education: English

4 credits. The exploration and application of various teaching styles and strategies in the teaching of literature in the secondary school English classroom; in-school observations and internships as paraprofessional experience. *Prerequisite Psychology 105; corequisite Education 225d.*

FRENCH

See Department of Modern Languages, page 72

GEOGRAPHY

See Department of History, page 66.

GERMAN

See Department of Modern Languages, page 72.

HEALTH CARE

See Department of Business, page 53.

DEPARTMENT OF HISTORY

Professors Kreider (*Chairman*), Mumford, Vassady, Winpenny
Associate Professor Poole

Bachelor of Arts

History, the inquiry into the deeds and thoughts of man's past, is a valuable and enjoyable basis for a liberal education. The student of history invariably acquires, through this vicarious experience, a better perspective which can lead to sound judgment and wise decisions. Furthermore, an understanding of the repetitive and complex nature of man's perennial problems produces in the student a healthy sophistication and a steady self-confidence which help to dissolve the uncertainties of modern life.

The Department's program is designed to prepare students for further study in graduate programs in history, theology, government, law, museum studies, and library science; or for careers in teaching, government service, and business.

The history major requires the student satisfactorily to complete 39 hours of work in history, including History 105 (or its equivalent) and 390. One is required to select nine hours in United States history; nine hours in European history, and six hours in non-United States, non-European courses.

History is one of the major areas in the social studies major, which prepares a student for certification to teach in secondary schools. Students with interest in this area should consult the detailed descriptions in the interdisciplinary section of this catalog, page 99.

It is possible for the student to acquire a Bachelor of Arts in History as a history major and receive certification in the social studies. For further explanation, contact a member of the History Department.

Combinations which allow the student a major and training for other careers are possible. For example, one may major in history and also take a recommended program of courses in business. Consult the Department for other options in combination with communication arts, political science, or other program areas.

105 Topics in the History of Western Civilization

3 credits. (Core) A highly selective approach to the long-range developments and to the major problems of our Western heritage.

201 History of the United States to 1877

3 credits. (Core) A narrative account and analysis of the social, political, economic, and diplomatic forces that have shaped the American experience from the earliest colonial settlements through the end of post-Civil War Reconstruction—roughly 1877.

202 History of the United States since 1877

3 credits. (Core) A narrative account and analysis of the social, political, economic, and diplomatic forces that have shaped the American experience from the beginning of Reconstruction—roughly 1865—through the resignation of Richard Nixon.

205 Modern Far East

3 credits. (Core) A general survey of China, Japan, Korea, and Southeast Asia from about 1800 to the present, with special emphasis on East-West relations.

215 English History to 1603

3 credits. (Core) Medieval England from the Anglo-Saxons to Queen Elizabeth I with emphasis on the constitutional and legal foundations, and the unity of Church and Crown.

216 English History since 1603

3 credits. (Core) The evolution of the monarchy and parliament since the Stuarts; the transition from a rural agrarian society into an industrial democracy; and the growth of the Commonwealth of Nations.

306 Recent History of the United States

3 credits. (Core) An intensive analysis of the vexing economic, political, social, and diplomatic forces responsible for shaping the American experience since 1900; conflicting interpretations emphasized.

313 History of Tsarist Russia

3 credits. (Core) The development of Russia from its medieval origins to the twentieth century with emphasis on the development of Tsarist institutions, society, and political development.

314 History of Soviet Russia

3 credits. (Core) A study of the Russian Revolution and the building of the new society with emphasis on the Soviet Union's position in the modern world.

315 Renaissance and Reformation

3 credits. (Core) The waning of the Middle Ages with emphasis on humanism in Italy and the North, the crisis in the Church, and the Protestant Reformation.

316 The Age of Louis XIV

3 credits. (Core) Europe in the seventeenth and early eighteenth centuries with emphasis on the ascendancy of France, the Dutch Republic, and Stuart England.

317 Revolution, Nationalism, and Democracy

3 credits. (Core) Nineteenth-century Europe from the Vienna Congress to World War I with particular emphasis on the conservative reaction to the French Revolution, the movement towards democracy, and the surge of nationalism.

318 The Age of Anxiety

3 credits. (Core) An examination of twentieth-century Europe, surveying both World Wars and their effect on modern society; emphasis on the rise of totalitarian ideologies, the plight of democracy, and the Depression.

323 History of China

3 credits. (Core) A survey of Chinese history and culture with emphasis on the modern period and the meeting of China and the West.

324 History of Japan

3 credits. (Core) A survey of Japanese history and culture from the beginning to modern times, including Japan's response to the Western impact.

327 History of Africa

3 credits. (Core) A survey of African history and culture using an interdisciplinary approach with emphasis on the history of the politics, cultures, arts, and societies of the African people.

328 Modern Africa

3 credits. (Core) Africa in the nineteenth and twentieth centuries with emphasis on the age of imperialism and colonialism, as well as on African nationalism leading to independence.

330-339 Studies in United States History

3 credits for each course. (Core) An analytical inquiry into special topics and periods: economic history, urban history, colonial America, the American Revolution, the Middle Period, the Age of Industrialism, technology and society, and so forth.

340-349 Minorities in United States History

3 credits for each course. (Core) An incisive view of minorities in a society venerating majoritarian rule, for example: Afro-American history, immigration and ethnicity, Southern history, Indian history, and women in history.

370-379 Special Problems

3 credits. (Core) Special subjects chosen as a response to student and faculty interest.

390 Historical Methods and Historiography

3 credits. (Core) The student will learn to do research in manuscript, primary, and secondary resources and will write a research paper. In addition, the course will examine interpretations and philosophies of history and recent approaches and techniques to research.

403 A History of United States Foreign Relations

3 credits. (Core) A study of the major personalities, events, and trends in United States foreign policy with an emphasis on the influence exerted by domestic considerations.

406 Social and Intellectual History of the United States

3 credits. (Core) An examination of the major social and intellectual movements in the United States from colonial times to the present with an emphasis on reform and reformers.

411 Greek and Roman History

3 credits. (Core) Athens in the classical age from Solon to Alexander; Rome during the Republic, the Augustan Age and the early Empire. By special arrangement.

412 Medieval History

3 credits. (Core) Western Europe from the decline of the Roman Empire to the fifteenth century with emphasis on the feudal system, the role of the Latin Church, and the rise of universities. By special arrangement.

480-489 Independent Study

Variable credit. (Core) Designed to offer an opportunity to use techniques of historical interpretation in specific problem areas. *Prerequisite* approval of the Dean of the Faculty; permission of instructor.

498-499 History Seminar

3 credits. (Core) A special course designed primarily for (but not limited to) senior majors in the Department. Research is an integral part of the learning experience.

GEOGRAPHY**105 World Geography**

3 credits. A regional and topical geography concentrating upon Europe emphasizing historical human rather than physical geography.

205 Geography of the United States and Pennsylvania

3 credits. A regional geography of the United States, emphasizing the interrelationships between geography and economics, politics, and culture. Pennsylvania will be examined as one of several case studies.

DEPARTMENT OF MATHEMATICS

Professors Blaisdell, Bossler, D. Koontz, Shubert (*Chairman*)

Associate Professors Dolan, J. Koontz, Morse

Bachelor of Science

The program in mathematics at Elizabethtown College is designed to prepare the mathematics major for graduate study, for secondary teaching, or for employment in industry and government. Service courses provide students in the physical, managerial, social, and life sciences with the mathematical tools essential for their respective fields. These courses also satisfy the General Education Core requirement and teach an awareness of the cultural significance of mathematics and its contribution to the modern world. Instruction is designed to promote the development of proficiency with deductive reasoning, the ability to mathematically model "real" world phenomena, problem solving strategies, and computational skills.

The Department offers four options. The *pure mathematics option* is designed to provide a firm foundation for successful graduate study in mathematics. The major objective is to promote the development of self-reliance, initiative, and confidence; i.e., mathematical maturity. The *secondary education option* is required for Secondary Education Certification. Students in this option are given a solid foundation in geometry, algebra, and statistics essential for effective teaching and analysis of the secondary school mathematics curriculum. The *applied mathematics option* provides a firm foundation in applied mathematics, enabling graduates to pursue careers in industry and government. Students electing this option usually develop additional strength in at least one area which uses mathematics extensively, such as the physical, social, life, or managerial sciences. Finally, a *computer science option* is available for the student who desires to be a highly skilled computer analyst with an unusually strong background in mathematics.

All mathematics majors are required to take a minimum of 36 hours in mathematics courses, including Mathematics 121, 122, 201, and 222, and at least two courses selected from 301, 302, 421, 422, and 441. Computer Science 125 or 115 is required and should be taken as early as possible. Each major is

also required to take either six hours in a modern language, or six hours of computer science courses in addition to Computer Science 125 or 115. Finally, at least one of the four options must be completed as follows:

The pure mathematics option requires Mathematics 302, 422, 441, and six hours from other 300 or 400-level mathematics courses.

The secondary education option (required for secondary education certification) requires Mathematics 301, 341, 351, 421, either 302 or 422, and six hours from other 300 or 400-level mathematics courses. In addition, Psychology 105; Education 305, 225d, 415, 225e, 473.

The applied mathematics option requires any five courses selected from Mathematics 321, 324, 351, 352, 361, 362.

The computer science option requires Mathematics 321, 324, 361, 362, and any other 300 or 400-level mathematics course. In addition, Computer Science 115, 145, 221, 222, and six hours in any 200, 300 or 400-level computer science courses. (These computer science courses will also fulfill the modern language or computer skills requirement.)

011 Intermediate Algebra (Developmental Studies 011)

2 credits. A study of the fundamental algebraic and computational skills used in certain science courses and prerequisite to Mathematics 101 and 117.

101 Precalculus Mathematics

4 credits. (Core) Precalculus study of the function concept and of particular classes of functions: polynomial, rational, algebraic, exponential, logarithmic, and trigonometric functions. The main objective of this course is to prepare students for Mathematics 121. *Prerequisite Mathematics 011 (competency).*

117 Concepts of Calculus

4 credits. (Core) Designed to give students in the biological, social, and management sciences a firm working knowledge of calculus. The approach is intuitive with emphasis on applications. Topics include differentiation, curve sketching, exponential functions, and integration. *Prerequisite Mathematics 011 (competency).*

121 Calculus I

4 credits. (Core) A presentation of the basic concepts and techniques of the differential and integral calculus of elementary functions, including a study of limits and continuity. Applications are taken mostly from the physical sciences. *Prerequisite Mathematics 101 (competency).*

122 Calculus II

4 credits. (Core) A continuation of 121, involving the calculus of the trigonometric, exponential, logarithmic, and rational functions. Analytic geometry is also included. *Prerequisite Mathematics 121.*

151 Probability and Statistics

3 credits. (Core) A study of the basic principles of probability, frequency distributions, measures of location and dispersion, sample and population relationships, estimation, and hypothesis testing. The main objective of this course is to introduce students to statistical thinking and tools, and their relation to everyday life.

172 Finite Mathematics

3 credits. (Core) A study of various non-calculus topics, including set theory, logic, probability, matrices, linear programming, and Markov chains. Applications will be drawn from the biological and social sciences.

201 Linear Algebra

3 credits. (Core) A presentation of the basic concepts and techniques of linear algebra, including vectors, vector spaces, matrices, determinants, systems of linear equations, and linear transformations. *Prerequisite Mathematics 121.* Fall semester

211 Concepts in Modern Mathematics I

3 credits. (Core) An introduction for liberal arts students and prospective elementary teachers to some of the concepts and applications of modern mathematics. Includes such topics as sets and functions, logic, measurement, metric system, introduction to the computer, numeration systems, and number theory. Will meet core requirements only for Elementary and Early Education majors. Fall semester

212 Concepts in Modern Mathematics II

3 credits. (Core) A continuation of 211 for prospective elementary teachers. Topics include the structure of number systems, geometry, geometry of measurement, and an introduction to probability and statistics. Will meet core requirements only for Elementary and Early Education majors. *Prerequisite Mathematics 211 or permission of instructor.* Spring semester

222 Calculus III

4 credits. (Core) A continuation of 122 completing the basic topics of the calculus sequence, including three-dimensional analytic geometry, series, calculus of functions of several variables, and an introduction to differential equations. *Prerequisite Mathematics 122.* Spring semester

231 Discrete Structures (Computer Science 231)

3 credits. Topics in discrete mathematics as they apply to computer science, including sets, relations, graphs, and trees, Boolean algebras, groups, and fields. *(Prerequisite Mathematics 151)* Fall semester.

252 Statistical Methods and Data Analysis

3 credits. (Core) A continuation of material presented in 151. The course will emphasize statistical techniques useful in business, the social, physical, and life sciences. Topics include simple and multiple regression analysis, elements of experimental design, analysis of variance, and survey sampling. *Prerequisite Mathematics 151.* Spring semester.

301 Abstract Algebra I

3 credits. (Core) An axiomatic study of a variety of algebraic structures and concepts including divisibility, congruences, modular arithmetic, number theory, sets, groups, and rings. Emphasis on the development of skill in proof construction and interpretation of abstract concepts. *Prerequisite Mathematics 201.* Fall, alternate years.

302 Abstract Algebra II

3 credits. (Core) A continuation of 301. Emphasis will be given to rings, integral domains, fields, polynomials over integral domains and fields, vector spaces, and the development of the system of rational numbers. *Prerequisite Mathematics 301.* Spring, alternate years.

321 Differential Equations

3 credits. (Core) A study of standard methods for solving ordinary differential equations and boundary value problems. Topics include n^{th} order linear differential equations, the Laplace transformation, and power series solutions. *Prerequisite Mathematics 222.* Fall semester.

324 Mathematical Models and Applications

3 credits. (Core) Survey of a number of mathematical topics and a variety of models in the social and life sciences. Problems provide motivation for the development of tools and techniques employed throughout applied mathematics: axiomatics, probability theory, matrix algebra, simulation, and linear programming. *Prerequisite Mathematics 201, 222.* Spring, alternate years.

341 Modern Geometry

3 credits. (Core) The concept of a geometry as a logical system based upon postulates and undefined elements, along with an appreciation of the historical evolution of geometries. Topics include incidence geometries, planes and space, congruence, inequalities, parallel postulates, parallel projections, similarities, circles, and additional theorems. Fall, alternate years.

351 Mathematical Statistics I

3 credits. (Core) A comprehensive development of the theory of statistics through a study of probability and distribution theory, including the uniform, geometric, binomial, hypergeometric, negative binomial, multinomial, Poisson, exponential, gamma, chi-square, Student's t, Snedecor's F, and normal distributions. *Prerequisite Mathematics 222*. Fall, alternate years.

352 Mathematical Statistics II

3 credits. (Core) A continuation of 351. A study of principles of statistical inference with an emphasis on estimation and hypothesis testing. *Prerequisite Mathematics 201, 351*. Spring, alternate years.

361 Numerical Methods in Matrix Algebra

3 credits. (Core) A study of selected topics in matrix algebra useful in advanced mathematical and statistical work involving multivariate analysis. Topics include several computer-oriented techniques applied to the inversion of matrices, determination of eigenvalues and eigenvectors, diagonalization of matrices, direct and iterative solution of systems of linear equations and iterative solutions of one or more non-linear equations. *Prerequisite Mathematics 201, 222, and Computer Science 125 or 115*. Fall, alternate years.

362 Numerical Analysis

3 credits. (Core) A study of iterative methods suitable for computer programming which are useful in solving a variety of mathematical problems arising in engineering and the sciences. Topics include curve fitting and function approximation, analysis of polynomial interpolation, numerical differentiation and integration, and numerical solutions of differential equations. *Prerequisite Mathematics 361 or permission of instructor*. Spring, alternate years.

370-379 Special Topics in Mathematics

Variable Credit. (Core) Directed study in topics of special interest to advanced undergraduate mathematics students. *Prerequisite permission of the Department of Mathematics Chairman*.

421 Real Analysis I

3 credits. (Core) A rigorous study of the fundamental concepts of analysis, including such topics as sets and functions, sequences of real numbers, series of real numbers, limits and metric spaces, and continuity. *Prerequisite Mathematics 201, 222*. Fall, alternate years.

422 Real Analysis II

3 credits. (Core) A continuation of 421, including such topics as integration, differentiation, Taylor series, sequences of functions, and series of functions. *Prerequisite Mathematics 421*. Spring, alternate years.

441 Topology

3 credits. (Core) A study of point set topology, using the axiomatic method. Topics include sets, metric spaces, topologies, continuity, separation axioms, compactness, and connectedness. *Prerequisite Mathematics 201, 222*. Spring, alternate years.

480-489 Independent Study

Variable credit. (Core)

Education 305 Practicum in Secondary Education: Mathematics

4 credits. *Prerequisite Psychology 105; corequisite Education 225d*.

MEDICAL SECRETARIAL SCIENCE

See Department of Business, page 47.

DEPARTMENT OF MODERN LANGUAGES

Associate Professors Daiga (*Acting Chairman*),
Goodling
Instructor Terrio

Bachelor of Arts

In addition to serving the increasing demand in the professions and industry for men and women who are at home in more than one linguistic and cultural setting, the Department of Modern Languages offers students a unique learning experience. The study of a modern foreign language brings together practical training in language skills (understanding, speaking, reading, and writing) with an understanding of the sociology, history, and literature of the culture from which the language springs and which it expresses. The pragmatic virtues of a useable skill thereby join the humane values of liberal education. The Department of Modern Languages offers programs of study which reflect its desire to encourage both mastery of one or more foreign languages and an overall appreciation of the cultural contexts in which they occur. It directly serves bachelor of arts degree candidates majoring in languages, students whose degree programs require studies in languages, and students who, for professional or personal reasons, wish to broaden their cultural background.

The Department of Modern Languages offers instruction in French, German, Spanish, and Russian with majors in French, German, and Spanish. A major in the Department may be met by completing 30 credit hours in one language above 201–202. A minimum of 15 hours above 201–202 must be taken in residence at Elizabethtown College. Language majors are required to participate in the Brethren Colleges Abroad program. Other language students who have completed 202 or above are encouraged to participate in the program.

Department majors must include the following courses: in residence: Modern Language 221, 222, 323, 324, and a three-credit independent study project (481–490); in the Brethren Colleges Abroad Program: Advanced Conversation and Composition, Phonetics, French/German/Spanish History, and History of (Fr/Ge/Sp) Literature.

Upon successful completion of the Modern Language Association Cooperative Foreign Language test, a student may be exempted from the language requirement. This examination is administered free of charge during Freshman Orientation Week and in the spring semester of each year. It may be taken at any other time during the college year for the gen-

eral college fee of \$20.00. However, this examination may be taken only once in any one language. Any student who wishes to continue beyond 101–102 the study of a language begun at another institution must take this examination to be placed in the appropriate course.

101 Beginning Language (Fr, Ge, Sp, Ru*, Esp*)

3 credits. Presents the elements of structure and seeks to develop the 4 language skills: hearing, speaking, reading, and writing. Culture-based readings and collateral laboratory assignments. Fall semester.

102 Beginning Language (Fr, Ge, Sp, Ru*, Esp*)

3 credits. A continuation of 101. *Prerequisite* 101 or placement by examination. Spring semester.

201 Intermediate Language (Fr, Ge, Sp, Ru*, Esp*)

3 credits. (Core) Reviews the fundamentals of structure and continues to develop the 4 language skills: hearing, speaking, reading, writing. Reading materials emphasize cultural and contemporary topics. Partially fulfills the B.A. language requirement. *Prerequisite* 102 or its equivalent ** Fall semester.

202 Intermediate Language (Fr, Ge, Sp, Ru*, Esp*)

3 credits. (Core) A continuation of 201. Completes B.A. language requirement. *Prerequisite* 201 or placement by examination. Spring semester.

*Russian and Esperanto are offered upon sufficient student interest and faculty availability.

**Equivalency is met by successful completion of at least two years of high school language courses.

221 Conversation and Composition (Fr, Ge, Sp)

3 credits. Provides an opportunity for self-expression, orally and in writing, on situations of everyday life. Review of grammatical structures. Vocabulary development. *Prerequisite* 202 or placement by examination. Fall semester.

222 Conversation and Composition (Fr, Ge, Sp)

3 credits. Topics of literary and cultural interest provide basis for conversation and composition. Emphasis on writing skills. Study of complex sentence structures. *Prerequisite* 221 or permission of instructor. Spring semester.

All courses numbered above 300 have a prerequisite of 222 or permission of instructor.

323 Introduction to Literature (Fr, Ge, Sp)

3 credits. (Core) Develops students' ability to read thoroughly, analyze, and appreciate literature. Selected readings representative of different literary genres.

324 Civilization (Fr, Ge, Sp)

3 credits. Traces significant facts and events of the cultural and historical evolution of France, Germany, or Spain to the twentieth century.

371-380 Special Problems (Fr, Ge, Sp)

Variable credit. Topics of special interest not otherwise covered in the curriculum. Topics depend upon student interest and faculty availability.

481-490 Independent Readings (Fr, Ge, Sp)

Variable credit. (Core) For senior language majors. Independent projects in some area of language or literature. Project may fulfill literature Core requirement, provided topic relates to literature in the foreign language and not to the language itself.

DEPARTMENT OF MUSIC

Professor Shull (*Chairman*)

Associate Professors Douglas, Harrison,
Kitchen, Simmers, Stites

Assistant Professor Malcom

Bachelor of Arts; Bachelor of Science

The music programs are designed to develop student comprehension and appreciation of music as a cultural force in the past and present. Music majors are prepared for professional careers in education, therapy, and studio teaching, as well as graduate study.

The Department offers three programs leading to the degrees of Bachelor of Science in Music Education, Bachelor of Science in Music Therapy, and Bachelor of Arts in Music.

The music education major requires Music 101, 102, 103, 104, 105, 201, 202, 203, 204, 231, 234, 237, 301, 311, 312, 321, 322, 343, 415 or 417, 440, 441, 442, 471, a minimum of 12 hours of applied music instruction, a minimum of eight credit hours in ensemble participation, and Education 205. A minimum grade of C or above in all music courses and in Education 205 is required for certification. Music education majors may elect a choral, instrumental, or general emphasis, the requirements of each emphasis varying slightly from the above. Program approval status has been granted by the Pennsylvania Department of Education and the National Association of Schools of Music.

The music therapy major requires Music 101, 102, 103, 104, 105, 141, 151, 201, 202, 203, 204, 231, 234, 237, 252, 301, 311, 321, 343, 353, 354, 415 or 417, 440, 441, 442, 455, 456, 473, 474, 475, 476, 477, 478, 479, a minimum of 8 semester hours in applied music instruction, and a minimum of six hours credit in ensemble.

Prior to admission into the Department

(1) The student will submit an application to the Director of Admissions during the year prior to the anticipated date of matriculation.

(2) The student will have an interview with a member of the Music Department in order to determine eligibility.

(3) The student will audition in his primary and secondary performance areas before a committee of the Music Department.

(4) The music faculty will select the students for the next academic year and submit their names to the Director of Admissions.

Admission into the music therapy program does not imply that a student will be guaranteed completion of the entire course of study nor that the student will be eligible to apply for internship programs. Each stu-

dent will be reviewed by the Music Department faculty at the conclusion of each academic semester. If the faculty believe that a student is not suitable academically or professionally for the area of study, the student will be counseled into other areas of endeavor. In order to remain in the Department as a music therapy major, a student must maintain the following standards:

- (1) The student must earn a grade of C or better in all music and music therapy courses.
- (2) The student must satisfactorily meet the standards and requirements in all field work education (including clinical practicum experiences and clinical internship experience).

A six-month internship in an approved clinical facility is required for graduation after completion of the four-year program. The music therapy program has been fully accredited by the National Association for Music Therapy and the National Association of Schools of Music.

The Bachelor of Arts in Music normally requires Music 101, 102, 103, 104, 105, 201, 202, 203, 204, 321, 322, 415 or 417, 419, 440, 441, 442, 12 semester hours credit in applied music and three hours of ensemble credit. The music requirements of the bachelor of arts degree are flexible and are determined by the needs and interests of each student. Under the guidance of a departmental adviser, each B.A. music major works out a program which includes at least 40 hours of music courses.

A copy of other departmental graduation requirements for music majors, including proficiency requirements in piano and voice, and recital participation and attendance, may be obtained from the Department Chairman's office.

The Music Department has a Preparatory Division which offers instruction to pre-college students, adults, and college students who desire to take instruction without credit. Instruction is available from qualified college student instructors and departmental faculty. Interested persons should contact the Director of the Preparatory Division.

101 Music Theory

2 credits. (Core) Fundamentals of music theory, harmony, and form with emphasis on scales, keys, modes, and notation.

102 Music Theory

2 credits. (Core) A continuation of Music 101 with an introduction to nonharmonic tones and seventh chords. Includes binary and ternary forms plus elementary keyboard harmony. *Prerequisite Music 101*, permission of instructor.

103 Fundamentals of Sight-Singing, Ear-Training, and Keyboard Harmony

1 credit. Development of visual, aural, and basic keyboard skills related to the theoretical and ana-

lytical materials covered in 101. *Corequisite Music 101*. (Students who fail Music 103 will not be permitted to enroll in second semester theory, Music 102.)

104 Sight-Singing, Ear-Training, and Keyboard Harmony

1 credit. A continuation of 103. *Prerequisite Music 103 or permission of instructor*. (Students who fail Music 104 will not be permitted to enroll in advanced music theory, Music 201.) Spring semester.

105 Introduction to Music Literature

3 credits. (Core) Introduction to the music of the Western world, major composers, and selected famous compositions, with emphasis on listening to music from the Baroque era to the present.

111 Voice Class

1 credit. (Core) Study of the fundamentals of breath control, tone production, and development of vocal technique. Open to all students.

113 Piano Class

1 credit. Designed to develop basic piano skills and knowledge of music fundamentals. Daily practice required. Not open to music majors. Credit for 113 given only upon completion of 114. Fall semester.

114 Piano Class

1 credit. A continuation of 113. *Prerequisite Music 113*. Spring semester

117 Piano Class

1 credit. Basic piano skills. Open to all music majors; required of those whose first applied instrument is not piano. *Prerequisite permission of instructor for non-majors*.

119 Guitar Class

1 credit. A continuation of basic folk guitar technique including an introduction to classical music for the guitar.

120 Guitar Class

1 credit. (Core) A thorough approach to classical guitar technique and classical literature.

141 Recreational Music

1 credit. The use of recreational instruments, materials and techniques with handicapped persons. *Prerequisite music major or permission of instructor*. Spring semester.

151 Introduction to Music Therapy

3 credits. A survey of music therapy through lecture-demonstration sessions, reading, student reports, and field trips. Emphasis on the potentials of music therapy with a variety of populations. *Prerequisite music major or permission of instructor.* Fall semester.

201 Advanced Music Theory

2 credits. Advanced harmony including seventh chords, chromatic harmony, and form and analysis. 18th century Counterpoint is introduced. Fall semester.

202 Advanced Music Theory

2 credits. A continuation of Music 201 with emphasis on 19th and 20th century harmonic practice. Includes compositions using 18th century contrapuntal techniques. Spring semester.

203 Advanced Sight-Singing, Ear-Training and Keyboard Harmony

1 credit. Continued emphasis on reading and dictation skills. (Students who fail Music 203 will not be permitted to enroll for the second semester of Music 202.) Fall semester.

204 Advanced Sight-Singing, Ear-Training and Keyboard Harmony

1 credit. A continuation of 203. *Prerequisite Music 203 or permission of instructor; corequisite Music 202.*

231 Brass Class

1 credit. Methods of tone production, fingerings or positions, care and repair, and methods and materials for teaching trumpet or cornet, French horn, baritone, trombone, and tuba. Fall semester.

234 Percussion Class

1 credit. Methods of tone production, care and repair, and methods and materials for teaching snare drum, cymbals, timpani, and other percussion instruments. Spring semester.

235 History of Jazz

3 credits. (Core) Exploration of the chronological development of jazz as an American art form, from Blues and Ragtime to Third Stream and current styles. Offered on demand

237 Elementary String Class

1 credit. Method of tone production, fingerings, care and repair, and methods and materials for teaching violin, viola, violoncello, and double bass. Fall semester.

238 Intermediate String Class

1 credit. A continuation of 237. *Prerequisite Music 237.* Spring semester.

252 Psychological Foundations of Music

2 credits. Study of acoustics and the psychology of music as they relate to life and the music professions. An examination of the events and circumstances that occur in music, and influence it. May be taken out of sequence or as an individual course by non-therapy majors. *Prerequisite music major or permission of instructor.* Spring semester.

301 Keyboard Harmony

2 credits. A course designed to provide functional piano skills in harmonizing melodies, improvising music and transposing at the keyboard. *Prerequisites Music 202–204, 269.*

311 Music in the Elementary School

3 credits. Thorough study of objectives, methods, and materials for elementary school music programs through singing, instrumental, rhythmic, creative, and listening activities. Detailed study and use of recent school music songbook series. Observations and laboratory experience included. *Prerequisite music majors or permission of instructor.* Fall semester.

312 Music in the Secondary School

3 credits. Methods and materials for secondary general music classes and performance groups, with special concentration on the junior high school general music class, adolescent voice problems, and the successful organization and direction of choral and instrumental performing groups. Observations and laboratory experience included. Spring semester.

321 Instrumental-Choral Conducting and Techniques

3 credits. Instruction in directing choruses, bands, and orchestras. Topics include conducting techniques, choral and instrumental methods and problems, score reading, and interpretation. *Prerequisite Music 202 or permission of instructor.*

322 Instrumental-Choral Conducting and Techniques

3 credits. A continuation of 321. *Prerequisite Music 321.* Spring semester.

325 Teaching Music in the Elementary School-Lab

1 credit. Music skills for elementary education majors. Fundamentals of music theory, chording skills on autoharp and piano (guitar optional), and music reading skills. May be exempted by proficiency exams. A minimum grade of C is required.

326 Teaching Music in the Elementary School

3 credits. Study of teaching methods and materials for use in a balanced elementary music program that includes rhythmic activities, singing, playing melody-harmony instruments, and listening activities. Topics include the use of music in developing learning centers, ways of promoting individual creativity, and methods of integrating music with other aspects of childhood education. *Prerequisite Music 325.* A minimum grade of C is required for certification.

337 Advanced String Class

1 credit. A continuation of 238. *Prerequisite Music 238.* Fall semester.

343 Woodwind Class

1 credit. Methods of tone production, fingerings, maintenance, care and repair, and methods and materials for teaching flute, oboe, clarinet, bassoon, and saxophone. Fall semester.

344 Woodwind Class

1 credit. A continuation of 343. *Prerequisite Music 343.* Spring semester.

353 Techniques in Therapy

2 credits. Course is designed to introduce behavioral research techniques and how they apply to the uses of music in the therapeutic setting. Students will examine the role music has in altering social and academic behavior in therapeutic applications and in life as a whole. Active participation and research is required. *Prerequisite Music 252.* Fall semester.

354 Research in Music

2 credits. Study of 4 basic research models and an appropriate research prose style. Emphasis on the potential application of experimental and quantitative research techniques to the study of music's effects on behavior. May be taken out of sequence, or as an individual course by non-therapy majors. *Prerequisite music major or permission of instructor.* Spring semester.

371-380 Special Problems

Variable credit. This sequence of courses permits the Department to offer courses to any group of students who express an interest in a particular area of study not a regular part of the curriculum.

415 Classical-Romantic Music Literature

2 credits. (Core) Survey of instrumental and vocal music of the Classical and Romantic periods. *Prerequisite Music 105, or permission of instructor.* Fall semester.

417 Impressionistic-Modern Music Literature

2 credits. (Core) Survey of music from Impressionism to the present avant-garde styles. *Prerequisite Music 105 or permission of instructor.* Spring semester.

419 Counterpoint

2 credits. A study of contrapuntal techniques of the sixteenth through twentieth centuries through representative composers and original compositions. *Prerequisite or corequisite Music 202.* Spring semester.

431 Piano Methods and Materials

2 credits. Modern methods in teaching piano to children, youth, and adults. Course includes a survey of teaching materials for various stages of progress, teaching demonstrations, and experience. Credit for 431 will be given only upon completion of 432. *Prerequisite two semesters of Music 269.* Alternate years.

432 Piano Methods and Materials

2 credits. A continuation of 431. *Prerequisite Music 431.*

440 Instrumental Arranging

2 credits. Arranging music for large and small ensembles; class performance of student works is combined with a study of the characteristics of each standard instrument and instrumental group. *Prerequisites Music 202 and 204.* Offered on demand.

441 History of Music

3 credits. Survey course with emphasis on the development of musical forms, styles, and media through considering music literature in its cultural environment. *Prerequisite Music 202 or permission of instructor.* Fall semester.

442 History of Music

3 credits. Survey course with emphasis on the development of musical forms, styles, and media through considering music literature in its cultural environment. *Prerequisite Music 202 or permission of instructor.* Spring semester.

455 Music in Therapy I: Principles

3 credits. Survey of experimental studies dealing with the effects of music on behavior, the intervention of music in therapy, and basic therapeutic approaches and techniques. *Prerequisite Music 252, 353, 354, or permission of instructor.*

456 Music in Therapy II: Practices

3 credits. Therapeutic approaches and techniques in music therapy. *Prerequisite Music 455, or permission of instructor.*

471 Student Teaching in Music

12 credits. Teaching experience and observation in elementary and secondary music classes. Instrumental and vocal emphases vary with student strengths and needs. *Prerequisite permission of Department.*

473-78 Clinical Experiences I-IV: Music Therapy

1 credit each. Supervised field experiences (observation and participation) in an approved clinical facility. Minimum of 30 hours total for each clinical experience. Music therapy majors only. *Prerequisites Music 141, 151.*

479 Professional Internship in Music Therapy

No credit. Six months of supervised practical experience with a registered music therapist in an NAMT approved facility. Taken only after completion of all other music therapy degree requirements. *Prerequisite permission of instructor.*

481-490 Independent Study

Variable credit. The purpose of this course is to offer individual students opportunities for musical composition, arranging, or research under faculty supervision. *Prerequisite permission of instructor.*

APPLIED MUSIC AND ENSEMBLES

Students who register for applied music for credit must meet minimum standard established by the Music Department. Contact the Department Chairman or Secretary for a list of standards for each applied area. Students who have not attained the level necessary for credit through the Department's Preparatory Division (see p. 74). Non-music majors with no piano background or limited background may enroll in Piano Class (Music 113, 114). Students in applied music advance as rapidly as their abilities permit. In this process they must study technical exercises and literature from various musical periods and styles. Students may register with or without credit for the established music ensembles and for other ensembles organized under faculty supervision; they may repeat the ensembles for credit which they may apply to the fine arts Core requirement. However, to receive credit, students must meet the standards for attendance at rehearsals and public performances established by the faculty director.

268 Voice

1 credit. (Core)

269 Piano

1 credit. (Core) Music therapy and music education majors whose principal instrument is not piano or organ must enroll in Music 117 before Music 269.

270 Organ

1 credit. (Core)

271 Violin

1 credit. (Core)

272 Viola

1 credit. (Core)

273 Cello

1 credit. (Core)

274 String Bass

1 credit. (Core)

275 Guitar

1 credit. (Core)

276 Flute

1 credit. (Core)

277 Clarinet

1 credit. (Core)

278 Oboe

1 credit. (Core)

279 Bassoon

1 credit. (Core)

280 Saxophone

1 credit. (Core)

281 Trumpet / Cornet

1 credit. (Core)

282 French Horn

1 credit. (Core)

283 Trombone

1 credit. (Core)

284 Baritone

1 credit. (Core)

285 Tuba

1 credit. (Core)

286 Percussion

1 credit. (Core)

360 Chamber Music

½ credit. (Core) General chamber music course from which groups such as Brass Ensemble, String Ensemble, Woodwind Ensemble, Chorale, and Piano Ensemble will be formed as need arises. An opportunity to participate in a variety of mixed chamber music ensembles.

361 Concert Choir

1 credit. (Core) Open to any student; acceptance based upon auditions by appointment. In addition to giving several performances prior to Christmas and participating in the annual Spring Concert, this group sings approximately 20 concerts in churches and schools in Pennsylvania and neighboring states each spring.

362 Choral Union

½ credit. (Core) Vocal ensemble open to any member of the student body (without prior audition). Its sections (SATB or SSA) are determined by the enrollment per part.

365 Orchestra

1 credit. (Core) Performs three major concerts during the academic year which constitute an invaluable part of musical training in literature and technique of performance. *Prerequisite (for winds and percussion) permission of instructor.*

368 Jazz Band

½ credit. (Core) The Elizabethtown College Jazz Band serves as an integral part of the college curriculum. It functions as a laboratory and as a touring band, playing the best in swing and jazz with the big band sound. Its program of music includes swing, pop tunes, ballads, and jazz, including old standards and current progressive jazz.

369 Concert Band

1 credit. (Core) Open to any qualified student; acceptance subject to approval by director. Performances include the annual winter and spring concerts, and a number of off-campus appearances.

DEPARTMENT OF OCCUPATIONAL THERAPY

Associate Professor Cohen (*Chairperson*)
Assistant Professor Sebelist
Instructors Gavin, Morgan
Fieldwork Coordinator Simon

Bachelor of Science

Professional Accreditation: The Department of Occupational Therapy formally received accreditation in 1976 by the American Occupational Therapy Association and the American Medical Association.

Occupational therapy is a health profession that utilizes purposeful activity with people of all ages both to promote well-being and to improve existing function. The occupational therapist has competencies to effect change in individuals with developmental delay and physical and psychological dysfunction. The student in occupational therapy engages in a program that integrates the humanities and the behavioral and physical sciences with professional study, thereby reflecting the liberal arts and community service traditions of Elizabethtown College.

Emphasis on the importance of both the humanities and the sciences in preparing for professional life is further manifest in the philosophical approaches which shape the Department. The bases of the program are a comprehensive knowledge about human development, an awareness of the significance of socio-cultural environments, and an understanding of the dynamics of human relations.

The primary objective is to produce a graduate who is a generalist practitioner qualified for employment in hospitals, community agencies, schools, rehabilitation centers, extended-care facilities and related human services agencies. With this foundation, the beginning therapist can progress to specialized areas of clinical practice as well as research, administration, and academia.

Occupational therapy majors must take Occupational Therapy 113, 114, 119, 120, 218, 219, 220, 222, 225, 307, 308, 313, 314, 315, 316, 319, 403, 408, 409, 412, 419, 420, 422, 423; Chemistry 101, 104; Biology 111, 201, 202, 202L; Psychology 105, 225; Anthropology 202 or 211; and Mathematics 151. Due to course sequencing and competencies, Biology 201, 202, 202L and Psychology 225 must be taken at Elizabethtown College.

ACADEMIC AND FIELD WORK EDUCATION

The occupational therapy program comprises a four-year course of classroom study and at least six months of field work education. Students will be responsible for their transportation and travel costs to and from assigned clerkship and field work centers. Such assignments will begin in the junior year and continue throughout the program. Students should expect to pay room and board expenses during the Level II field work experience in the event these are not provided by the affiliated hospital or clinic. The student may select either of the following options:

First Option: The student may complete three years of academic work followed by three months of Level II field work experience during the summer between the junior and senior years. The student will then complete the senior academic year followed by three months of Level II field work the next summer.

Second Option: The student may complete four years of academic work followed by six months of Level II field work experience.

ADDITIONAL FIELD WORK EDUCATION

After completing the required six months of Level II field work, the student may elect to complete an additional Level II field work and may pursue this study in areas such as pediatrics, mental retardation, gerontology, home health, hand rehabilitation, sensory integration, school system, advanced psychosocial or physical rehabilitation, research, administration and education.

RELATED EXPENSES

Additional expenses for the occupational therapy student normally include uniforms, school patches, malpractice liability insurance, registration examination fee, and similar charges. Although not required, all students will be urged to become members of the American Occupational Therapy Association and the Pennsylvania Occupational Therapy Association at the reduced student rates.

NATIONAL CERTIFICATION EXAMINATION

Upon being awarded the degree in occupational therapy and successful completion of Level II field work, the student is eligible to sit for the national certification examination, held twice a year, usually in June and January.

ADMISSION REQUIREMENTS FOR DEPARTMENT

1. Prior to admission into the Department

- a. The student will submit an application to the Director of Admissions before December 15 of the year prior to the anticipated date of matriculation. Students are admitted into the program in the fall semester only. DUE TO COURSE SEQUENCING, THE DEPARTMENT DOES NOT ACCEPT TRANSFER STUDENTS FROM WITHIN OR OUTSIDE THE COLLEGE.
- b. The student will have an interview with a member of Occupational Therapy and/or a practicing clinician in order to determine eligibility.

- c. The occupational therapy faculty will select the students for the next academic year and submit their names to the Director of Admissions.
- d. The Department of Occupational Therapy requires that the student submit an updated medical history on forms provided by Elizabethtown College with the application for admission. The examination may be completed by the student's family physician or by the College physician at cost to the student. It is also required that the student sign a waiver to release information in the medical history to the Department of Occupational Therapy. Due to the clinical component of the program, the Department reserves the right to require that the student submit additional medical histories or obtain medical treatment should a problem (physical or emotional) arise which the Department feels may jeopardize the student's participation in the program.

2. Evaluation after admission into the Department

- a. Admission into the Department of Occupational Therapy does not imply that a student will be guaranteed completion of the entire course of study nor that he will be eligible to sit for the certification examination. The student will be reviewed by a faculty evaluation committee at the conclusion of each academic year. If the committee believes that a student is not suitable academically or professionally for the area of study, the student will be counseled into other areas of endeavor. In order to remain in the Department the student must maintain the following standards:
 - (1) The student must have at least a 2.5 average in all courses required for the major (both occupational therapy and related requirements).
 - (2) The student must satisfactorily meet the standards and requirements in all phases of field work education including Level I field work, laboratory, and Level II field work experience.

The curriculum in occupational therapy may be subject to revision during the period 1984-86.

113 Basic Concepts in Occupational Therapy

3 credits. An introduction to the theoretical basis for the practice of occupational therapy. The historical importance of purposeful and creative activity suitable for the life span continuum; the cultural and developmental use of activity to foster normal development and to treat emotional and physical dysfunction. Fall semester.

114 Basic Concepts in Occupational Therapy

3 credits. A continuation of 113 emphasizing the treatment concepts, theories, and skills through which occupational therapy finds its present and potential contributions to health care. Involvement in community activities will enrich student understanding of cultural influence. Spring semester.

119 Construction Activities I

2 credits. Overview of construction activities using hard materials such as wood, tile, copper and splinting media. Instruction in the basic skills of the process with emphasis on activity analysis and therapeutic application in occupational therapy. Prerequisite permission of instructor. Fall semester.

120 Construction Activities II

2 credits. Overview of construction activities using soft materials such as weaving, textiles, needlework, macrame. Instruction in the basic skills of the process with examination of each activity for its therapeutic potential. Spring semester.

218 Kinesiology I

2 credits. Application of the principles of functional anatomy. Emphasis on normal movement and patterns of movement including body mechanics, grasp and gait analysis. *Prerequisite Biology 201*. Spring semester.

219 Expressive Activities

2 credits. An overview of activities used to facilitate the expression of emotion in a therapeutic setting. Some of the media to be included are puppetry, painting, collage and blockprinting. Prerequisite permission of instructor. Fall semester.

220 Life Skills

2 credits. An examination of the daily activities of man including self care, vocational, recreational and social functions. Emphasis and analysis of normal patterns of activity through lecture and laboratory sessions. Prerequisite permission of instructor. Spring semester.

222 Group Process

2 credits. A learning experience in which the student is exposed to theories, dynamics and stages of groups. Planning occupational therapy activity groups will be emphasized. Spring semester.

225 Human Development Laboratory

3 credits. Refer to Psychology 225 for lecture description. The laboratory emphasizes the central nervous system maturation as it relates to normal sequential motor development and social/emotional growth. Concentration is on reflexive motor behavior and age appropriate activities during the 0-12 years. *Corequisite Psychology 225*. Fall semester.

307 Neurobehavioral Science I: Neurology

3 credits. A review of basic neuroanatomy and neurophysiology with emphasis on the functional neuronal systems (motor, sensory, limbic), clinical conditions, and therapeutic treatment. *Prerequisite or corequisite Biology 201, 202, 202L, OT315*. Fall semester.

308 Neurobehavioral Science II: Perspectives in Psychiatry

3 credits. This course examines major psychiatric disorders, medication, treatment techniques and team responsibilities and relevant philosophical issues. Community mental health will be included. Spring semester.

313 Medical Surgical Conditions I

2 credits. Medical lectures relative to the etiology, prognosis and treatment of the major conditions resulting in physical disability. *Corequisite OT 315*. Fall semester.

314 Medical Surgical Conditions II

2 credits. Lectures relative to etiology, prognosis and treatment of major pediatric diagnoses and other general medical conditions. Spring semester.

315 Physical Rehabilitation

4 credits. Overview of evaluations and treatment intervention strategies, including the neurodevelopmental, biomechanical and rehabilitative approach used to enhance the function of individuals with major physical disabilities. Lecture, laboratory, seminar and Level I Field Work experience. Fall semester.

316 Psychosocial Rehabilitation

4 credits. An examination and application of major psychiatric theories relevant to occupational therapy. Various evaluation tools, treatment plan design, ethical concerns, case studies and professional reporting will be coordinated with Level I Fieldwork experience, lecture, laboratory and seminar. Spring semester.

319 Splinting and Orthotics

1 credit. Functional anatomy of the hand incorporated in basic splinting and orthotic principles. Emphasis on evaluation and fabrication techniques with application to specific disabilities. Prerequisite permission of instructor. Fall semester.

370-79 Special Topics

Eight 1 credit courses covering Biofeedback, Community Mental Health, Computers in Rehabilitation, Gerontology, Hospice, Mental Retardation, Rehabilitation of the Hand and Sign Language are offered as electives in alternate semester or year sequences, upon sufficient demand.

403 Perspectives in Pediatrics

3 credits. A comprehensive study of the treatment of pediatric patients with psychosocial and/or physical dysfunction. Impact on the family, importance of play, assessment tools and treatment techniques will be reinforced through Fieldwork experience. Fall semester.

408 Advanced Concepts with Material Cultures

3 credits. A study of the establishment and administration of occupational therapy programs. Quality assurance, the structure of AOTA, its relationship to the National Health Care System, and current legislative issues will be discussed. Fall semester.

409 Methods of Research

2 credits. This course embodies the scientific method as the basis for all research. Included will be research designs and evaluation and guidelines for conducting research. Fall semester.

412 Senior Practicum

2 credits. The course offers graduating occupational therapy seniors the opportunity to conduct scholarly research and/or indepth investigation within an area of their major. Spring semester.

419 Pre-Vocational Activities

2 credits. A study of the principles and techniques used in the vocational assessment of selected patients with potential for employment. Prerequisite activity courses will be the foundation for discussion and laboratory experiences. Spring semester.

420 Sensory Integration

2 credits. Introduction to study of the sensory integration of the central nervous system with exposure to standardized evaluation procedures, sensory integrative disorders and remediation techniques. Emphasis on theoretical considerations within a developmental framework. Lecture and laboratory. Fall semester.

422 Kinesiology II

2 credits. Advanced principles of movement including the influence of cultural, psychological and physiological factors. Use of movement in the evaluation and habilitation/rehabilitation of individuals with dysfunction. Spring semester.

423 Human Relations

2 credits. An integrative approach to the relationship of the therapist and patient emphasizing the responsibilities of both. Group interaction, one to one therapeutic relationships, roles and leadership will be addressed. Fall semester.

PHILOSOPHY

See Department of Religion and Philosophy, page 93.

**DEPARTMENT OF PHYSICAL
EDUCATION AND HEALTH**

Professor Wright

Associate Professor Ober (*Chairman and
Athletic Director*)

Assistant Professors Garrett, Kauffman, Smith,
Whitmore

The Department of Physical Education and Health affords an opportunity for all students to develop an interest in play and recreation which will be fun and worthwhile to them during college and later life. We strive to develop social and moral standards such as sportsmanship, teamwork, tolerance, and other character benefits which come from properly conducted play.

All students at Elizabethtown College are required to take four semester hours of physical education courses of which two may be taken in aquatics. Students must take at least one semester of an aquatics activity or successfully complete a proficiency test in swimming. The remaining physical education requirements may be satisfied by electing any of the courses offered except Physical Education 275 and 285. No more than six semester hours of physical education may count towards the 128 hours required for graduation from the College. Physical Education 270 counts as three credits towards graduation, but only one activity towards Core.

105 Beginning Swimming (women)

1 credit. (Core) Elementary-level instruction in the basic strokes for non-swimmers.

115 Intermediate Swimming (women)

1 credit. (Core) Instruction in the techniques of the basic strokes; survival swimming and water safety.

125 Beginning Swimming (men)

1 credit. (Core) Elementary-level instruction in the basic strokes for non-swimmers.

135 Intermediate Swimming (men)

1 credit. (Core) Instruction in the techniques of the basic strokes; survival swimming and water safety.

145 Field Hockey-Volleyball (women)

1 credit. (Core) Rules, playing techniques, and skill development.

150 Adapted Physical Education

1 credit. (Core) Individual activity or corrective exercises adapted to the needs and abilities of the student. Graded pass/no pass. *Prerequisite recommendation of a physician.*

155 Tennis-Bowling (coed)

1 credit. (Core) Rules, playing techniques, and skill development.

160 Adapted Physical Education

1 credit. (Core) Individual activity or corrective exercises adapted to the needs and abilities of the student. Graded pass/no pass. *Prerequisite recommendation of a physician.*

165 Golf-Badminton (coed)

1 credit. (Core) Rules, playing techniques, and skill development.

185 Basketball (women)

1 credit. (Core) Rules, playing techniques, and skill development.

195 Basketball-Soccer (men)

1 credit. (Core) Rules, playing techniques, and skill development. Fall semester.

205 Archery-Badminton (coed)

1 credit. (Core) Rules, playing techniques, and skill development.

210 Basketball (men)

1 credit. (Core) Rules, playing techniques, and skill development. Spring semester.

217 Senior Life Saving

1 credit. (Core) Instruction and practice in life saving, water safety, and pool management. Meets Red Cross certification requirements. Graded pass/no pass.

218 Water Safety Instruction (coed)

1 credit. (Core) Advanced life saving skills, swimming instruction, and use of pool equipment. Meets Red Cross Instructor certification requirement. Graded pass/no pass. *Prerequisite current Senior Life Saving Certificate.*

225 Tennis (women)

1 credit. (Core) Rules, playing techniques, and skill development. Fall semester.

235 Tennis (men)

1 credit. (Core) Rules, playing techniques, and skill development. Fall semester.

240 Bowling

1 credit. (Core) Rules, playing techniques, and skill development.

245 Racquetball (women)

1 credit. (Core) Rules, playing techniques, and skill development.

250 Volleyball (coed)

1 credit. (Core) Rules, playing techniques, and skill development.

255 Handball-Racquetball (men)

1 credit. (Core) Rules, playing techniques, and skill development.

260 Adapted Physical Education

1 credit. (Core) Individual activity or corrective exercises adapted to the needs and abilities of the student. Graded pass/no pass. *Prerequisite recommendation of a physician.*

265 Physical Conditioning (coed)

1 credit. (Core) Techniques of exercise, jogging, weight-training, and body development.

270 Advanced Individual Sports

3 credits. (One hour only counts for Core.) Methods, techniques, and teaching skills in selected sports. Summer session only.

275 Contemporary Health Problems

3 credits. A study of contemporary physical, mental, and social aspects of personal and community health problems. Educational principles applied to teaching in the elementary school.

285 Physical Education for the Elementary School Child

3 credits. A study of the physical growth of children from ages 4–12, with consideration of games and activities appropriate to the physical development of the child in the elementary grades.

290 Interpretive Dance Theory (coed)

1 credit. (Core) The development of an awareness of the body as an instrument which can communicate ideas, thoughts, and emotions through dance. Priority given to music therapy majors. Fall semester.

295 Introduction to Body Movement and Dance Form (coed)

1 credit. (Core) Disciplines of ballet and muscular control.

370-380 Special Topics in Physical Education (coed)

1 credit. (Core) These courses may include such physical activity courses as horsemanship, bicycling, self-defense techniques, skiing, and so forth, for which there will likely be an extra charge. Graded pass/no pass.

481-490 Self-Directed Physical Education Activity

1 credit. (Core) Designed for the student who attends Evening Division or studies abroad, or who has extenuating circumstances which prohibit him from meeting regularly scheduled physical education classes. Graded pass/no pass.

**DEPARTMENT OF PHYSICS
AND EARTH SCIENCE**

Associate Professors Custer (*Chairman*),
Thompson
Assistant Professor Bowman

Bachelor of Arts; Bachelor of Science

Programs in the Department of Physics and Earth Science are designed to convey an appreciation and understanding of physical and natural systems and to prepare students for professional careers in contemporary society. In accord with the philosophy that both majors and non-majors should be broadly exposed to studies of natural phenomena, the Department offers a wide variety of formal courses and informal learning experiences, many of which are intended to develop students' abilities for continuing self-education. Analysis, problem solving, and hands-on experience are emphasized at all instructional levels.

Students majoring in department programs commonly go on to careers in physics, engineering, computer technology, and teaching, or to graduate school.

The Department offers three programs: 1) a Bachelor of Science in Physics, 2) a cooperative program in engineering at the completion of which the student is awarded a bachelor of science degree from The Pennsylvania State University and a bachelor of arts degree from Elizabethtown College, and 3) a secondary general science concentration.

Physics majors are required to take Physics 132, 231, 232, 343, 404, Chemistry 101, 104, Mathematics 121, 122, and 222. Those planning on graduate study or work in industry must also take Physics 305, 306, 344, 345, 403, 407, 408, 490; and six credits of electives from Mathematics 201, 321, 324, 351, 361, or 362. Those planning to certify to teach physics at the secondary level must take Biology 105; and 106 or 108; Computer Science 115; Education 305, 225d, 225e, 415, 473; and six credits of electives from the offerings of the Department of Physics and Earth Science.

Majors in engineering will complete three years at Elizabethtown College and two years at The Pennsylvania State University. To be eligible for admission at The Pennsylvania State University, a student must have a 2.3 cumulative average at Elizabethtown College and be recommended by Elizabethtown College. Students who have studied at The Pennsylvania State University prior to matriculation at Elizabethtown College must have a quality point average of at least 2.5 for all college work taken. At Elizabethtown College the student will complete Phy-

sics 132, 231, 232, 305, 306, Drawing 115, 116; Mathematics 121, 122, 222; Chemistry 101, 104; and other courses required for the specific field of engineering chosen. A student recommended for transfer to the Pennsylvania State University will be eligible to enter any of the following engineering curricula provided they have maintained the indicated quality point average: 3.0 (chemical, civil, electrical, mechanical, and engineering science); 2.50 (aerospace, agricultural, environmental, industrial, mining, nuclear, petroleum and natural gas, metallurgy, and ceramic science).

Students in the general science certification program can choose a concentration in physics.

Those interested in the program should consult the detailed description in the interdisciplinary section of this catalog.

111 Introduction to Physics

4 credits. (Core) Introduction to the concepts of physics through a study of the laws of motion, energy, electricity, light, relativity, radioactivity, and other topics of interest. Hours: lecture 3, laboratory 2. Fall semester.

203 General Physics I

4 credits. (Core) First semester of a comprehensive study of the principles of physics with applications and instrumentation. Topics include mechanics, waves, sound, light, optics, and electricity. Hours: lecture 3, laboratory 2. *Prerequisite Mathematics 101.* Fall semester.

204 General Physics II

4 credits. (Core) Continuation of 203. Topics include heat, radioactivity, and magnetism. Hours: lecture 3, laboratory 2. *Prerequisite Physics 203.* Spring semester.

132 College Physics I

4 credits. (Core) First of a three-semester series which investigates basic principles of physics using differential and integral calculus. Topics include measurement, Newton's laws, impulse-momentum, work energy, linear and rotary concepts, equilibrium of rigid bodies, and oscillations. Hours: lecture 3, laboratory 2. *Corequisite Mathematics 121.* Spring semester.

231 College Physics II

4 credits. (Core) Second of a three-semester series which investigates basic principles of physics using differential and integral calculus. Topics include gravitation, fluid dynamics, waves, sound, thermodynamics, charge and electric fields. Hours: Lecture 3, laboratory 2. *Prerequisite Physics 132; corequisite Mathematics 122.* Fall semester.

232 College Physics III

4 credits. (Core) Third of a three-semester series which investigates basic principles of physics using differential and integral calculus. Topics include electricity, magnetism, light, and introductory quantum physics. Hours: lecture 3, laboratory 2. *Prerequisite Physics 231; corequisite Mathematics 122.* Spring semester.

305 Introduction to Mechanics I

3 credits. (Core) Introduction to vector analysis, conditions of equilibrium, coordinate systems, cables, virtual work, and oscillating systems; emphasis on problem solving. *Prerequisite Physics 232, Mathematics 222.* Fall semester.

306 Introduction to Mechanics II

3 credits. (Core) Study of motion of systems of particles, motion of rigid bodies, particles in a central force field, accelerated coordinate systems, and the application of Lagrange's Equations; emphasis on problem solving. *Prerequisite Physics 305.* Spring semester.

333 Computer Systems Interfacing (Chemistry 333, Comp. Sci 333)

3 credits. Digital logic and integrated circuits to implement logic; architecture and machine language programming of minicomputers and microprocessors; design, testing, and construction of instrument-to-computer and computer-to-computer interfaces; design and testing of supporting software. Spring semester.

343 Introduction to Quantum Theory (Chemistry 343)

3 credits. (Core) Introduction to the principles of quantum theory, radiation, atomic spectra, and the extranuclear structure of the atom. *Prerequisite Physics 232, Mathematics 222.* Fall semester.

344 Modern Physics

3 credits. (Core) Introduction to nuclear and atomic processes. Topics include radioactivity, the nuclear force, nuclear interactions, quantum statistics, solid state applications, and elementary particles. *Prerequisite Physics 343.* Spring semester.

345 Advanced Physics Laboratory

2 credits. (Core) Advanced laboratory with experiments in modern physics, electricity and magnetism, optics, and thermodynamics; employs a variety of experimental techniques. *Prerequisite Physics 343.* Spring semester.

370-379 Special Topics in Physics

Variable credit. (Core) Study of an advanced topic, experimental or theoretical, of special interest to the student. *Prerequisite permission of instructor.*

403 Kinetic Theory and Thermodynamics

3 credits. (Core) Study of the kinetic theory of matter, statistical mechanics, and the principles of thermodynamics, including temperature, heat, work, internal energy, entropy, and enthalpy. *Prerequisite Physics 232, Mathematics 222.* Spring, alternate years.

404 Electronics

4 credits. (Core) Practical and theoretical study of fundamental components and circuits, including transistors, diodes, integrated circuits, electron beams, filters, amplifiers, control circuits, and some digital electronics. Hours: lecture 3, laboratory 3. Fall, alternate years. *Prerequisite Physics 232 or permission of instructor.*

407 Electricity and Magnetism I

3 credits. (Core) First of a two-semester sequence dealing with static and time dependent, electric and magnetic fields, electronic components, measurements, and properties of matter. Topics include vector calculus solutions of field equations, boundary conditions, network theory, electrical properties of matter, and basic properties of static magnetic fields. *Prerequisite Physics 232.* Fall, alternate years.

408 Electricity and Magnetism II

3 credits. (Core) Continuation of 407. Topics include magnetic properties of matter, time dependent fields, Maxwell's equations, radiation, and special relativity. *Prerequisite Physics 407.* Spring, alternate years.

481-489 Independent Study

Variable credit. (Core) Study and experimentation in an area of interest to the student and faculty member. *Prerequisite permission of instructor.*

490 Seminar

2 credits. (Core) directed experimental or theoretical study requiring faculty acceptance of proposal and a final formal report of work. *Prerequisite permission of instructor.*

DRAWING**115 Graphics and Descriptive Geometry**

2 credits. Study of engineering-related drawing, including projection systems, lettering, sketching, pictorial drawing. Descriptive drawing will include three-dimensional problems whose solution requires change in position and rotation. Students must provide themselves with suitable drawing equipment. Hours: lecture 1, laboratory 5, Fall semester, alternate years.

116 Graphics and Descriptive Geometry

2 credits. A continuation of 115. Additional topics include intersection of objects, vectors, and graphs. *Prerequisite Drawing 115.* Spring semester, alternate years.

Education 305 Practicum in Secondary Education: Science

4 credits. Teaching science in secondary schools. *Prerequisite Psychology 105; corequisite Education 225d.*

EARTH SCIENCE**105 Field Earth Science**

8 credits. (Core) Intensive introductory program of field and laboratory studies emphasizing in situ instruction. Includes geologic and topographic mapping, and investigations of the earth and atmosphere. *Prerequisite permission of instructor.* Summer sessions.

107 Astronomy

4 credits. (Core) General principles of solar system and stellar astronomy; laboratories provide practical experience in determining astrometric quantities. Algebra is used to treat topics throughout the course. Hours: lecture 3, laboratory 2.

108 Meteorology

4 credits. (Core) General studies of causes, effects, and distribution of atmospheric phenomena. Laboratories include collection and analysis of weather and climatic data. Hours: lecture 3, laboratory 2. Fall and spring semesters.

111 Physical Geology

4 credits. (Core) Study of the physical earth incorporating its materials, processes, and forms. Topics include minerals, rocks, volcanoes, glaciers, earthquakes, and plate tectonics. Hours: lecture 3, laboratory 2. Spring semester.

112 Historical Geology

4 credits. (Core) Study of the history of the earth and its life forms, as well as methods utilized to decipher the earth's past. Hours: lecture 3, laboratory 2. *Prerequisite Earth Science 111.* Fall semester.

301 Mineralogy/Petrology

3 credits. (Core) Introduction to systematic crystallography and mineralogy, stressing identification and associations. Igneous and metamorphic petrology includes genetic processes, and microscopic and hand specimen petrography. Hours: lecture 2, laboratory 2. *Prerequisite* Earth Science 111 and permission of department chairman.

370-379 Special Topics in Earth Science

Variable credit. (Core) Study of an advanced topic, experimental or theoretical, of special interest to the student. *Prerequisite* permission of instructor.

481-489 Independent Study

Variable credit. (Core) Students are required to define and do significant research on a problem in the earth sciences.

**DEPARTMENT OF
POLITICAL SCIENCE**

Professor Selcher (*Chairman*)
Assistant Professors McClellan, McDonald

Bachelor of Arts

Through the liberal arts blend of social science and the humanities which is political science today, the Department seeks to assist the student in thinking clearly and logically about political questions facing the community, state, nation, and world. The Department perceives three principle approaches to the discipline: the normative approach considers the values and ethical choices inherent in public policy; the empirical approach employs techniques to analyze how political systems function; the policy-oriented approach encourages the individual to responsible and informed action as citizen, government official, lawyer, or businessman. A major in political science provides preparation toward a career in party or interest group politics, law, public administration, regional and urban planning, personnel and public relations, teaching, publishing, communications, the diplomatic corps, political research, and consulting, among others. Beyond its worth in career terms, the study of politics and government can lead to more effective pursuit of one's political interests as a civic responsibility or as an avocation.

The major in political science requires the following courses which comprise the principal subfields of the discipline: Political Science 117, 118, 202, 205, 301, 308, and 330. Outside the department, Mathematics 151 and Sociology 331 are required. The remaining 12 hours may be chosen from any combination of department offerings for a total of 33 hours of political science courses. General electives from the other social sciences are encouraged.

The Department participates in *the secondary school certification in social studies program* and *the forestry and environmental management major*, offering a political science concentration in each. Students with interests in these areas should consult the detailed descriptions in the interdisciplinary section of this catalog, page 98.

105 Introduction to Government

3 credits. (Core) The functions and differing types of government, emphasizing the relationship between the individual and the government in democratic, authoritarian, and totalitarian systems.

117 American National Government

3 credits. (Core) Analysis of the development of the federal system, civil rights and liberties; public opinion, political organizations, and elections; the workings of the executive legislative, and judicial branches in the context of current developments.

118 State and Local Government

3 credits. (Core) Analysis of the politics, institutional structures and processes, and policies of state and local governments in the U.S.; comparison of different types of state and local systems and their handling of various political issues.

202 Political Theory

3 credits. (Core) Analysis of the development of significant political ideas from the Greek city-state to the present. Spring semester.

205 International Relations

3 credits. (Core) Survey of political, economic, legal, psychological, and military features of international relations with consideration of national interest, foreign policy, diplomacy, alliances, and balance of power.

301 Comparative Governments

3 credits. (Core) A comparison of the structures and functions of the political systems of selected foreign nations, emphasizing the historical development of party systems, political cultures, and executive-legislative relations. Fall semester.

305 American Foreign Policy

3 credits. (Core) Analysis of United States foreign relations since World War II, with emphasis on the development of current major issues, the domestic and bureaucratic politics of foreign relations, and policy options in current and future problems.

308 Public Administration

3 credits. (Core) A study of administrative organization, personnel administration, decision-making, and communications, with emphasis on the relation of administrative bureaus to the public, the executive office, the legislature, and the judiciary. Fall semester.

329 American Political Thought

3 credits. (Core) Historical analysis of major American political thinkers from the Puritans to the present with special consideration of the founding principles of the American republic. Fall semester.

330 Research Methods (Sociology 330, Social Work 330)

3 credits. Techniques of empirical political research and the development of modern methods of analysis and data presentation in political science, with reference to contributions from other social sciences. A major research project on methodology is required. Fall semester.

333-339 Topics in Public Policy

3 credits. (Core) Detailed examination of topics in policy development and analysis, such as government regulation of business, the mass media and American politics, public policies in health, education, and so forth.

342 Politics of Developing Nations

3 credits. (Core) An analysis of interdisciplinary theories of political development with application to specific case studies of contemporary nation-building in transitional societies. Spring semester.

370-379 Special Problems

3 credits. (Core) Topical areas and problems of political science; subjects chosen in accord with student demand.

382 Modern Ideologies

3 credits. (Core) A survey of Marxist, socialist, and democratic theories and an analysis of the motives and goals of their major proponents. Spring semester.

401 Constitutional Law

3 credits. (Core) History and development of the Constitution. Evaluation of leading Supreme Court decisions with emphasis on current decisions and cases in the light of history and of possible future trends. Fall semester, alternate years.

413 U.S. Security Policy

3 credits. (Core) Analysis of the impact of national security problems on the U.S. government and foreign policy with a focus on various for defense and peace. *Prerequisite Political Science 205, Political 305 or permission of instructor* Fall semester.

471 Capitol Semester Internship

6 credits. Applied field experience in public administration as a junior assistant in the daily operations of state or local government agencies. *Prerequisite Political Science 308 and permission of instructor* Spring semester.

480-489 Independent Study

Variable credit. Designed to offer independent study to advanced students, making use of techniques of political science in specific problem areas not included in the Department's regular offerings

PREMEDICAL AND ALLIED HEALTH PROGRAMS

Charles D. Schaeffer, Jr., Ph.D., *Chairman, Health Professions Advisory Committee.*
Members: Drs. Richard L. Bowman, Frank Polanowski, James L. Dively, Martin O. L. Spangler

Training for premedical and related disciplines, such as dentistry, osteopathic medicine, veterinary science, optometry, and podiatric medicine, may be accomplished through several routes. The *biology option* prepares the student through specific requirements that are the same as those for the biology major except that students should select Biology 235, 343, 341, or 342 instead of 331, 332, or 347. The *chemistry option* culminates with a B.S. degree in biochemistry, and includes two semesters of biochemistry (Chemistry 323-324 with laboratory). Additional routes of potential interest include a major in most other departments, with sufficient concentration in basic sciences. Most medical schools, however, find that those students who are extremely well prepared in biology and chemistry make the most attractive candidates, and these majors comprise the overwhelming majority of students accepted. During a student's first year at Elizabethtown, he or she will follow a curriculum similar to that outlined below, with minor variations depending upon several factors, such as starting level in foreign language, English, and mathematics. After completion of the freshman year, all students should choose an academic major and follow the curriculum for that major, in consultation with the appropriate academic advisor and the Health Professions Advisory Committee. Additional details concerning the biology option may be found on p. 44; further information regarding the biochemistry major is on p. 54.

A close working relationship exists between the premedical student and the faculty members who monitor and evaluate the student's academic growth. Four faculty are currently members of Elizabethtown's Health Professions Advisory Committee, two each from the biology and chemistry departments. This committee serves four primary functions: (1) to assist, counsel, and otherwise prepare students for entry into programs within the health professions; (2) to function as a screening and advisory body for those students who plan to attend schools in the health professions; (3) to

draft a composite letter of evaluation and endorsement for worthy candidates, and to forward this information to the appropriate medical college admissions committees; and (4) to maintain statistics on medical college placement for advising and administrative purposes.

The premedical student will introduce himself to the Health Professions Advisory Committee early in his freshman year, and will formally register with the Committee shortly after declaring a major. This will normally occur during the fall semester of the sophomore year. At this time, students will find it prudent and beneficial to discuss future course scheduling, long-term career plans, and related matters with Committee members.

Most students need to register for standard admissions tests, such as the MCAT, during the early part of spring semester, junior year. After obtaining registration materials, students will seek the Committee's advice regarding the most effective methods of completing their preparation for these extremely important examinations. The majority of the tests are administered during spring, although the Committee may recommend that a student retake an examination during the fall testing period in the event of initial low scores. During early April, the student will again contact the Committee, this time to initiate the process of generating letters of recommendation and endorsements. After receiving evaluations from 3–5 individuals chosen by the student in consultation with the Committee, the Committee will determine whether or not to prepare a written endorsement of the candidate. If such a letter is written, it will be forwarded, upon receipt of written notice from the student, to the appropriate medical college admissions committee. If the Committee does not choose to endorse the student, the student may solicit other individuals to write letters of evaluation, completing the application process himself.

Following the completion of the application process, the student will consult the Committee for assistance with the interview process. Applications are generally completed during the first several weeks of the student's senior year; students are urged to consult specific school catalogs for deadlines. Every student has the responsibility of informing the Committee of changes in status during the application process, and of communicating any decisions (positive or negative) made by medical schools regarding admission.

The Committee believes that a strong positive recommendation and endorsement, combined

with adequate scores on the requisite standard examinations and outstanding classroom performance, will put the candidate in an excellent position in the highly competitive admissions processes. The College's placement record indicates that this belief is well founded. Better than three-fourths of all Elizabethtown College applicants have been accepted (exceeding twice the national average), entering programs of excellent reputation, including those at Jefferson Medical College, Temple University School of Medicine, Philadelphia College of Osteopathic Medicine, Hahnemann Medical College, and the Pennsylvania State University College of Medicine (Hershey).

Representative First Year Courses

<i>Credits</i>	<i>Fall Semester</i>
4	Biology 111
4	Chemistry 113
3	Modern Foreign Language*
3	English*
4	Mathematics 121**
<i>Credits</i>	<i>Spring Semester</i>
4	Biology 112
4	Chemistry 114
3	Modern Foreign Language
3	English
4	Mathematics 122**

*Placement tests determine starting level.

**Required in chemistry option.

DEPARTMENT OF PSYCHOLOGY

Associate Professors Dennis, Ellsworth
(Chairman)

Assistant Professors McLaughlin, Sagar,
Eiserer

Bachelor of Arts; Bachelor of Science

The Psychology Department provides a liberal arts education, preparation for careers in human services and education, and preparation for graduate and professional training in clinical, experimental and applied psychology, and related fields. The student learns the principles and theories of psychology as currently understood and acquires the ability to derive new principles. The student is required to participate in topical and methodological studies and may participate in field experience and research and their evaluation.

The Department offers two degree programs: one leading to the Bachelor of Arts in Psychology, and one leading to the Bachelor of Science in Psychology, these programs differing mainly in their General Education Core requirements. In addition, a psychology concentration is offered for students pursuing the secondary education certification in social studies; see the interdisciplinary section of this catalog, page 99, for details.

Courses required for both the Bachelor of Arts and the Bachelor of Science degrees are Psychology 105, 106, 213, 218, 221, 317, 402, 413 or 414, and 425 or 435; psychology electives for a minimum of 33 credit hours and eight credit hours of biology. For the Bachelor of Arts degree, the student is also required to complete six credit hours of intermediate language or to demonstrate equivalent competency; for the Bachelor of Science degree, the student is required to complete six credit hours of mathematics and three credit hours of computer science.

105 General Psychology

3 credits. (Core) An introduction to the principles of behavioral science including consideration of motivation, learning, personality, and sensory and perceptual processes.

106 Experimental Psychology

4 credits. (Core) An examination of the empirical and logical bases of psychological theories of perception, learning, memory and thinking, and

motivation and emotion. Laboratory exercises provide evidence for contemporary psychological theories. Hours: lecture 3, laboratory 2.
Prerequisite Psychology 105. Spring semester.

213 Research Methods

4 credits. (Core) An introduction to the methods of psychology. Emphasis on research design and data analysis as the basis for evaluating psychological literature. Consideration is given to the philosophy of science. Hours: lecture 3, laboratory 2.
Prerequisite Psychology 105. Fall semester.

215 Industrial and Organizational Psychology

3 credits. (Core) An introduction of the principles of psychology involving the problems of people at work; topics include personnel selection, training, performance evaluation, motivation, and human factors research. *Prerequisite Psychology 105.* Offered on demand. Note: credit will not be granted for Psychology 215 if credit has already been granted for Business Administration 369.

218 Psychological Statistics

3 credits. (Core) A discussion of psychological statistics, emphasizing analysis of variance, varieties of correlation, errors of measurement, and selected non-parametric procedures. *Prerequisite Psychology 106, 213.* Spring semester.

221 Theories of Personality

3 credits. (Core) A critical survey of the major theories of personality, including psychoanalytic, humanistic, trait, and behavioral approaches. *Prerequisite Psychology 105.* Fall semester.

225 Developmental Psychology

3 credits. (Core) An introduction to physical, perceptual, linguistic, intellectual, and social-emotional human development, covering the periods of infancy, childhood, adolescence, adulthood, and old age. *Prerequisite Psychology 105.*

235 Social Psychology

3 credits. (Core) An introduction to the processes by which the social environment influences human thought, feelings, and behavior, providing coverage of such topics as conformity, prejudice, aggression, pro-social behavior, attraction, and love. *Prerequisite Psychology 105.*

317 Learning

4 credits. (Core) Study of major theories, methods, and empirical findings in the area of both human and animal learning. Students conduct various experiments with humans and animals. Hours: lecture 3, laboratory 2. *Prerequisite Psychology 106, 213.* Fall semester.

322 Abnormal Psychology

3 credits. (Core) A study of mental disorders including schizophrenic, substance abuse, anxiety, and psychosexual disorders. Research and theories regarding diagnosis, causes, and treatments are reviewed. *Prerequisite Psychology 105.* Spring semester.

333 Tests and Measurements

3 credits. (Core) An introduction to the standardization, validity, and reliability of psychological tests, including the study of standardized tests and their interpretation. *Prerequisite Psychology 105.* Spring semester.

334 The Exceptional Child

3 credits. (Core) A survey of the research and theories on the physical, intellectual, and social-emotional deviations of children, including an examination of both psychologically handicapped and gifted children. *Prerequisite Psychology 225 or permission of instructor.* Spring semester.

370-379 Special Problems in Psychology

Variable credit. (Core) Directed study of topics not otherwise covered in the curriculum. Offered when student interest and faculty availability justify. *Prerequisite permission of instructor.*

401 Counseling Psychology

3 credits. (Core) A review of current theories, research, and techniques of counseling. Relevant to students planning careers in various areas of social and psychological services. *Prerequisite Psychology 322, or permission of instructor, or both.* Fall semester.

402 History and Systems of Psychology

3 credits. (Core) A study of major historical systems in psychology, including structuralism, functionalism, behaviorism, gestalt psychology, and psychoanalysis. *Prerequisite Psychology 106, 213.* Fall semester.

413 Perception

3 credits. (Core) A study of the theories and empirical findings in the area of sensory and perceptual functioning with emphasis upon visual processing. Students will be expected to conduct a research project. *Prerequisite Psychology 106, 213 or permission of instructor.* Fall, 1984.

414 Memory and Thinking

3 credits. (Core) A study of the theories and empirical findings in the areas of the acquisition and retrieval of information, concept formation, and problem solving. Students will be expected to conduct a research project. *Prerequisite Psychology 106 and 213 or permission of instructor.* Spring, 1984.

425 Advanced Developmental Psychology

3 credits. (Core) A study of the developmental theories of psychological abilities, traits, and processes, including a critical review of relevant empirical evidence. Students will be required to conduct a research project. *Prerequisite Psychology 106, 213 and 225, or permission of instructor.* Fall, 1983.

435 Advanced Social Psychology

3 credits. (Core) A critical examination of selected areas of social psychological research with attention to methodological issues and social relevance. Students will participate in original research. *Prerequisite Psychology 106, 213 and 235, or permission of instructor.* Spring, 1985.

475 Field Study

4 credits. Supervised training and experience in a professional setting related to psychology, generally for two afternoons a week, plus weekly meetings with faculty members. Placement depends on student interest and goals, and availability of professional setting. *Prerequisite Psychology 401 or permission of instructor.*

480-489 Independent Study in Psychology

Variable credit. (Core) This course offers the mature student the opportunity independently to pursue educational experiences not otherwise available in the curriculum. *Prerequisite permission of instructor.*

491-492 Research Practicum

Variable credit. (Core) Research in psychology under the close supervision of a faculty member. Subjects for research are chosen in an area of interest to both persons. Offered by individual faculty-student arrangement. *Prerequisite Psychology 213, permission of instructor.*

DEPARTMENT OF RELIGION AND PHILOSOPHY

Professors Clemens, Puffenberger,
Ritterspach, Snowden, Sutphin (*Chairman*)

Bachelor of Arts

Considering the heritage of religion and philosophy, the Department seeks to broaden the student's liberal arts curriculum by pursuing creative ventures which often cross over traditional disciplinary lines. While committed to the Judaeo-Christian tradition, the Department does not profess a single denominational consensus; it operates in the midst of a complex and pluralistic religious field. The Department encourages in the student a reflective stance which focuses on the basic philosophies, value systems, and faith expressions of mankind as means of preparing the student for seminary, graduate school, social work, counseling, and journalism, among other fields.

A major shall complete 33 hours of course work in the Department beyond the six hours required in the General Education Core. At least 27 hours of this course work must be above the 100-level. All majors will be required to complete a six-hour senior research project by independent study to be supervised and read by at least two members of the Department.

Students seeking a double major shall complete 24 hours of course work in the Department beyond the six hours required in the General Education Core. At least 18 hours of this course work must be above the 100-level and must include one three-hour Independent Study (Religion or Philosophy 480-89). Students who desire a double major shall declare their intentions to the Department during their junior year.

RELIGION

105 The Bible: Themes and Issues

3 credits. (Core) An introduction to the scriptures of Judaism and Christianity with special emphasis upon their original setting in life. An important aspect of the course is familiarization with techniques of Bible study.

115 Religions of the Modern World

3 credits. (Core) A survey of the major Eastern and Western religious traditions from phenomenological, cultural, and comparative points of view.

125 Contemporary Religious Issues

3 credits. (Core) A constantly changing survey of relevant problems and issues on the contemporary religious scene with primary emphasis upon the thought patterns rather than the institutional forms of the Judaeo-Christian faith.

201 Introduction to the History, Literature, and Faith of Israel

3 credits. (Core) A study of the history of Israel as a basis for understanding the literature of the Old Testament and Biblical ways of faith; an introduction to the various tools of Biblical criticism. Fall semester.

202 Introduction to the History, Literature, and Faith of Christianity

3 credits. (Core) A survey of New Testament history, an orientation to the literature of the New Testament, and an appreciation of the conditions which gave rise to Christianity. Spring semester.

221 Western Religions

3 credits. (Core) A study of the major religions of the Near East and the Western hemisphere. Primary emphasis on a historical and comparative study of Judaism, Christianity, and Islam. Fall semester.

222 Eastern Religions

3 credits. (Core) An encounter with the major living religions of the Far East with emphasis upon comparative study of Hinduism, Buddhism, Jainism, Confucianism, Taoism, Sikhism, and Shinto. Spring semester.

230 Religion in America

3 credits. (Core) A study of the rich diversity of religious America within the setting of the larger cultural and social experience. Emphasis on the uniquely American religious experience, and the identity and integrity of each separate tradition.

231 Contemporary Theology

3 credits. (Core) A deeper exposure to some aspect of theological thinking or to the study of a particular theologian or group of theologians. Religion 125 recommended. Fall, alternate years.

301 New Testament Greek I

3 credits. An introduction to the fundamentals of reading *koine* Greek, the language of the New Testament. Fall semester.

302 New Testament Greek II

3 credits. A continuation of 301 with emphasis on mastery of the grammar; commencement of reading in the New Testament itself. *Prerequisite Religion 301*. Spring semester.

310 Archaeology and the Bible

3 credits. (Core) The significance of recent discoveries in Biblical archaeology in Israel, with further consideration of discoveries in Mesopotamia, Egypt, and Syria. Generally, field work in Lancaster County excavations will be a part of the course. *Prerequisite* Religion 201. Spring, alternate years.

320 Biblical Theology

3 credits. (Core) A study of the nature and meaning of the redemptive acts of God in the history of the Hebrews and early Christians. *Prerequisite* Religion 201, 202. Spring, alternate years.

330 Anabaptist and Pietistic Movements

3 credits. (Core) A study of the historical and theological backgrounds of the Anabaptist and Pietistic movements as they relate to the Church of the Brethren and other denominations within the context of "The Believer's Church." Spring, alternate years.

340 History of Christian Thought

3 credits. (Core) A survey of representative thinkers in the history of the Christian Church and an examination of the central doctrines of the Christian faith. Religion 125 recommended. Fall, alternate years.

370-79 Special Topics in Religion

3 credits. (Core) An intensive study of a selected area within the sphere of religious faith. This course rotates among the departmental staff and includes topics such as the following: liberation theology, religion in America, evangelical theology, civil religion in America, Hebrew, the Buddhist tradition, esoteric religions.

480-89 Independent Study

Variable credit. Upon the student's initiative a project of study and research may be undertaken with the supervision of a faculty member in the Department. The senior research project, required of all majors, will normally be registered during the student's senior year. For double majors the requirement is a three-hour independent study.

PHILOSOPHY**105 Contemporary Philosophical Issues**

3 credits. (Core) Concerns itself with issues such as human freedom, the search for the self, and meaning in human life. These issues are introduced by means of selected literary and philosophical texts.

115 Contemporary Ethical Issues

3 credits. (Core) An examination of current issues with attention to the way in which moral norms

function within the individual and the society. Emphasis upon heightened self-awareness and the perspective of social ethics.

201 Ancient and Medieval Philosophy

3 credits. (Core) A comparative study of the Platonic and Aristotelian views of life, treating them as metaphors of life rather than as speculations about the nature of life. Fall semester.

212 Aesthetics

3 credits. (Core) An inquiry into the nature of creativity in the areas of art and science, beginning from the assumption that by comparing and contrasting creativity in these two areas the student comes to a greater understanding of artistic creativity. Spring semester.

213 Philosophy and Science

3 credits. (Core) A series of readings on scientific methodology, explanation, limitation of science, science and society, science and ethics, and science and religion.

255 Advanced Ethics

3 credits. (Core) A constantly changing inquiry into the values, norms, and thought forms used in the areas of bio-ethics, environmental ethics, business ethics, and the ethics of conflict and social change.

310 Contemporary Philosophy

3 credits. (Core) Study of selected primary sources in existentialism and phenomenology in order to understand some of the more important philosophical assumptions of contemporary culture. Fall semester.

320 Philosophy of Religion

3 credits. (Core) A study of man's rational efforts to establish the validity of the religious perspective with particular emphasis on theism, the proofs for the existence of God, and the nature of evil. Spring semester.

340 Modern Philosophy

3 credits. (Core) Reading and discussion of primary sources from the writings of Descartes, Spinoza, Leibnitz, and Kant. Offered on demand.

370-79 Special Topics in Philosophy

3 credits. (Core) A constantly changing specialized study within the field of philosophy or ethics featuring such areas as existentialism, philosophy of language, communal lifestyles, philosophy East and West.

480-89 Independent Study

Variable credit.

DEPARTMENT OF SOCIOLOGY-ANTHROPOLOGY- SOCIAL WORK

Associate Professors Eisenbise, Burdick,
Iacono-Harris (*Director of Social Work
Program*) Kraybill (*Chairman*), Lehr, Ziter

Bachelor of Arts; Bachelor of Science

The programs in this department provide for the study of interpersonal and intergroup relationships, and the growth, changes, structures, and processes of human society. The courses reflect the philosophical tradition of service of Elizabethtown College and meet the challenges which arise from the struggles of increasing urbanization.

Students majoring in sociology, social work, and anthropology go to graduate school seeking higher degrees in public health, hospital administration, urban and regional planning, social work, law, sociology or anthropology. Some move directly into careers in personnel work, social research, both adult and juvenile probation, private and governmental social welfare agencies, and in other fields where knowledge of the interrelationships of society is important.

The Department offers three basic programs leading to either a bachelor of science or a bachelor of arts degree. The *program in sociology* emphasizes theoretical and quantitative approaches so that the student can easily move into graduate programs or into career opportunities. The *program in sociology-anthropology* stresses basic anthropological principles and an acquaintance with the diversity of world cultures. The *program in social work* recognizes both the rural and urban environment of the Elizabethtown College community and seeks to prepare students for professional social work practice in either setting. Courses and field experiences emphasize the distinctiveness and the similarity of various social service delivery systems. The program is accredited by the Council on Social Work Education.

The Department also participates in the secondary education certification in social studies offering sociology/anthropology concentrations. Interested students should consult the detailed descriptions in the interdisciplinary section of this catalog, page 98.

The sociology program requires Sociology 101, 201, 330, 331, and 332; Mathematics 151, and 252; Communication Arts 105 (or passage of competency test). In addition, the student must elect five sociology-anthropology courses for a total of 30 hours.

The sociology-anthropology program requires five courses in sociology: Sociology 101, 201, 330, 331, and 332. In addition, the student must elect five anthropology courses.

The social work program requires prospective students to apply for admission to the program. This application requires the following:

1. A formal interview with a social work faculty member where professional interests and abilities are explored.
2. Two reference rating forms completed by persons who know the applicant well.
3. Formal admittance to Elizabethtown College.

This application procedure may occur before the student enters Elizabethtown College, or at any time after admittance. Admittance into the program does not guarantee that the student will graduate with a degree in social work. The advisor, in conjunction with the social work faculty reserves the right to dismiss a student from the major on the basis of unprofessional behavior and/or academic performance. The student has the right of appeal of the decision based on unprofessional behavior in the same manner as dismissal for academically related reasons.

The social work program requires the following courses: Biology 105 and 106 or 108; Sociology 101; Psychology 105, 225; Political Science 117; Economics 101; Mathematics 151; Communication Arts 105 (or passage of competency test); Social Work 222, 233, 240, 325, 327, 329, 330, 345, 346, 470, 471, 498; plus 12 credits of professionally related courses, directed toward the student's professional goal and approved by the social work advisor.

SOCIOLOGY

101 Introduction to Sociology

3 credits. (Core) Basic concepts and theories relating to the study of society with emphasis on fundamental sociological methods and approaches.

105 Social Issues

3 credits. (Core) An introduction to the methods used by sociologists to define and analyze social issues. Implications for public policy are stressed. Special attention is devoted to population pressures and urbanization.

201 Principles of Sociology

3 credits. (Core) Introduction to the methods of social research and theory. Topics include the history of the discipline, the meaning and use of key concepts, and varied approaches to the study of sociology. *Prerequisite Sociology 101.* Fall semester, alternate years.

212 Population

3 credits. (Core) Population, its size, growth, trends, composition; the relation of population units in their various aspects to economic, social, political, and other major forces, trends, and institutions.

215 Criminology

3 credits. (Core) Sociological approaches to the study of crime, with emphasis on current sociological theory and research; special consideration of the judicial system and penology.

220 Race and Ethnic Relations

3 credits. (Core) Study of racial and other minorities in the United States, and their relationship with dominant groups. Includes study of discrimination, prejudice, racial myths, and methods of reducing intergroup tensions.

222 Introduction to Social Welfare (Social Work 222)

3 credits. (Core) The historical, philosophical, and sociological perspectives of social welfare. Social work, as one profession involved in social welfare, is explored and compared to other professions. Field trips to social service agencies. *Prerequisites Sociology 101, Psychology 105.* Both semesters.

233 Human Behavior in the Social Environment (Social Work 233)

3 credits. (Core) A study of the interrelationships of social systems, with particular emphasis upon the impact of the environment on human development. Special consideration of the influence of ethnicity, racism, sexism, and ageism upon behavior and the implications for human service delivery. *Prerequisite Psychology 105, Sociology 101.* Fall Semester.

237 Group Dynamics

3 credits. (Core) A consideration of empirical research in group dynamics within the larger attempt to integrate a theoretical understanding of group dynamics with its experiential application to everyday life.

305 Marriage and the Family

3 credits. (Core) A brief comparative view of different family patterns; a functional approach to questions related to both premarital and postmar-

ital aspects of married and family life in our American culture.

317 Sociology of Religion

3 credits. (Core) An analysis of the role and function of religion and religious institutions in society; a study of religion as a social and cultural system.

330 Methods of Social Research (Political Science 330, Social Work 330)

3 credits. (Core) Basic procedures of sociological research, including research design, sampling, measurement, and data analysis. *Prerequisite Sociology 101, Mathematics 151.* Fall semester.

331 Social Statistics

3 credits. (Core) Application of the concepts of Mathematics 151, Probability and Statistics, to particular statistical procedures used in social research and analysis. *Prerequisite or corequisite Mathematics 252, Sociology 330, Political Science 330, Social Work 330.* Spring semester.

332 Sociological Theory

3 credits. (Core) An examination of the nature of theory and an analysis of sociological theories from early times to the present day with special emphasis on the major paradigms of contemporary sociology. *Prerequisite Sociology 201, 330.* Spring, alternate years.

342 Modern Corrections

3 credits. (Core) An overview of the origins, processes, organization, and contemporary trends of corrections for juveniles and adults, including an examination of current issues and alternatives to correctional policies.

344 Gerontology

3 credits. (Core) The study of several interrelated problem areas of the aged: physiological, psychological, and social.

350 Sociology of War and Peace

3 credits. (Core) A study of the social sources and consequences of war and peace cross-cultural perspective with special attention to nuclear deterrence and the systemic forces that contribute to a peaceful world order.

371-380 Special Topics in Sociology

3 credits. (Core) Readings and discussion of topical areas of sociology. Topics will include, but not be limited to, the following: complex organizations, women in society, evaluation research, the arms race.

471 Internship

Variable credit. Applied field instruction in a sub-field of the discipline chosen to meet the needs of the student. *Prerequisite permission of instructor.*

481-491 Independent Study in Sociology

Variable credit. (Core) Offers to advanced students the opportunity for independent study, making use of sociological approaches, in areas not included in the regular offerings within the Department. *Prerequisite permission of instructor.*

498-499 Research Seminar

Variable credit. Research in sociology under the close supervision of the instructor and with peer discussion and criticism. A completed research experience is required. *Prerequisite permission of instructor; prerequisite or corequisite Sociology 330, 331, 332.*

ANTHROPOLOGY**201 Physical Anthropology**

3 credits. (Core) An introductory course in the study of human beings as physical organisms, their place in nature, their biological development and differentiation, and their early cultural attainments. Fall semester

202 Cultural Anthropology

3 credits. (Core) An introductory course in the study of culture, its nature and characteristic features, with special attention to language, kinship, and religious systems, including a survey of the theories of culture and the methods for studying it. Spring semester.

211 World Cultures

3 credits. (Core) A survey of some of the peoples and cultures of the world from early times to the present with emphasis on physical, cultural, linguistic, and demographic factors. Fall semester.

307 Peoples and Cultures of Africa

3 credits. (Core) Ethnographic and cultural analysis of the folk background and contemporary customs of the peoples of sub-Saharan Africa with special attention to the problems of culture change.

308 Peoples and Cultures of Latin America

3 credits. (Core) Ethnographic and cultural analysis of the folk background and contemporary customs of the peoples of Latin America with special attention to the problems of culture change.

360 Sociocultural Change

3 credits. (Core) Theoretical perspectives on sociocultural change and a consideration of the mechanisms, patterns, and strategies of change.

371-380 Special Topics in Anthropology

3 credits. (Core) Readings and discussion of topics in anthropology chosen in accord with the

needs and interests of the participants. Past topics have included Indians of North America, archaeology of Mexico, ethnography of Mexico, and primitive religion.

481 Independent Study in Anthropology

Variable credit. (Core) Designed to give the advanced student in anthropology the opportunity to pursue specialized topics not regularly offered.

SOCIAL WORK**222 Introduction to Social Welfare (Sociology 222)**

3 credits. The historical, philosophical, and sociological perspectives of social welfare. Social work, as one profession involved in social welfare, is explored and compared to other professions. Field trips to social service agencies. *Prerequisites Sociology 101, Psychology 105* Both semesters.

233 Human Behavior in the Social Environment (Sociology 233)

3 credits. A study of the interrelationships of social systems, with particular emphasis upon the impact of the environment on human development. Special consideration of the influence of ethnicity, racism, sexism, and ageism upon behavior and the implications for human service delivery. *Prerequisite Sociology 101, Psychology 105* Fall semester.

240 Basic Helping Processes

3 credits. Skills of providing effective human service, with emphasis on an understanding of human behavior and needs, the role of the helper, and various approaches to problem solving. Laboratory training. Fall semester.

325 Rural Social Welfare Systems

3 credits. The development and organization of the rural community; its network of services designed to address community, family, and individual problems; community development and administration of social service programs. Topics include the relation of policy to social goals, community organization practice methods, organizational development and administration, and the impact of institutional discrimination. *Prerequisite Social Work 222.* Spring semester.

327 Urban Social Welfare Systems

3 credits. On-site study of a large urban area with emphasis on urban social problems and social service systems and on comparisons between urban and small town-rural areas. *Prerequisite Social Work 325.* Mini-term.

329 State and National Social Welfare Systems

3 credits. Study of state and national social welfare policies and systems with emphasis on the relation of social problems, such as poverty, insecurity, and unequal opportunity, to social, economic, and political systems. *Prerequisite* Social Work 327, *Political Science* 117, *Economics* 101. Fall semester.

**330 Methods of Social Work Research
(Sociology 330, Political Science 330)**

3 credits. Fundamental instruction in understanding current research in social work and in applying this knowledge through the course project. *Prerequisite or corequisite* Mathematics 151. Fall semester.

345 Generalist Social Work Practice

3 credits. Functions of the generalist social worker explored in light of theories of social systems, problem-solving, and helping processes. The impact on social change of variously-sized client systems, racism, social class, ethnic consciousness, sexism, and ageism. "Volunteer service" required. *Prerequisite* Social Work 240. Fall semester.

346 Variant Approaches to Social Work Practice

3 credits. Builds upon the generalist approach by studying various approaches such as crisis intervention, reality therapy, behavior modification, case work, group work, neighborhood development, and others. Application of content through concurrent field instruction. *Prerequisite* Social Work 345, *corequisite* Social Work 470. Fall semester.

371-380 Special Topics in Social Work

3 credits. Reading and discussion of topical areas of social work. Topics will include, but not be limited to: complex organizations, women in society, evaluation research, ageing: needs and services, human sexuality, child welfare, family treatment, group treatment, services to minority groups.

470 Introductory Field Instruction

3 credits. Supervised field instruction for at least 200 hours in an agency. Student begins to assume responsibility with client systems in such ways as monitoring tasks, providing support, conducting group activities, and assisting the social worker with other professional responsibilities. *Corequisite* Social Work 346. Fall semester.

471 Advanced Field Instruction

14 credits. Supervised field instruction for at least 392 hours plus a weekly on-campus seminar. Students proceed from an "assistant" position to

one of complete client responsibility under direct supervision. Roles students assume may include advocate, enabler, social broker, and program planner. *Prerequisite permission of instructor; corequisite* Social Work 498. Spring semester.

480-489 Independent Study in Social Work

Variable credit. Opportunity for advanced students independently to pursue study otherwise not available in the curriculum. *Prerequisite permission of instructor.*

498 Senior Seminar

3 credits. Final course integrating the theory from preceding courses with the professional experience of field instruction. A major project required. *Prerequisite* Social Work 470; *corequisite* Social Work 471. Spring semester.

SPANISH

See Department of Modern Languages, page 72.

Interdisciplinary Programs

FORESTRY AND ENVIRONMENTAL MANAGEMENT

Bachelor of Science

The College offers a cooperative program with Duke University which leads to a bachelor of science degree from Elizabethtown and a Master of Forestry or Master of Environmental Management from Duke. The student who undertakes this major gains a wide exposure to the liberal arts through fulfilling the College's General Education Core in addition to courses in the student's major, and gains professional training at Duke in such areas as forest resource production, resource science, resource policy and economics, or other individually tailored programs.

In this program the student spends three years at Elizabethtown College, fulfilling the General Education Core requirements, and two years at Duke's School of Forestry and Environmental Studies. In the first year at Duke the student completes the undergraduate degree requirements and is awarded the bachelor of science degree from Elizabethtown. After an additional year, Duke awards the degree of Mastery of Forestry or Master of Environmental Management.

In order to prepare students for the professional program at Duke, the College offers a pre-forestry and environmental management program with major and minor concentrations in biology, business, and political science; this program is detailed below. However, any undergraduate major can be considered for admission to Duke; such students should take at least one year of biology, mathematics, and economics. Students interested in this field should be aware that although neither the program at Elizabethtown College nor the undergraduate program at Duke University is accredited by the Society of American Foresters, the graduate program at Duke does meet the accreditation requirements.

Admission to Duke is by application, and is based on an evaluation of a student's undergraduate record, Graduate Record Examination scores, letters of recommendation, and interviews.

There are variations of the schedule herein described. For further details contact Mr. Laughlin.

Majors shall complete all General Education Core requirements for the bachelor of science degree. Within the Core areas the following courses should be taken:

Mathematics Core (six hours): Mathematics 117, 172 or 151; 101, 121, or 151, 121. If 151 is not taken for Core, it is strongly recommended as an elective.

Science Core (eight hours): Majors with a concentration in biology should take chemistry; majors with concentrations in business or political science should take biology.

Social Science Core (nine hours): three of the nine hours must be in psychology or sociology/anthropology

Each student will complete a major concentration in either biology, business, or political science, and two minor concentrations totaling 18 hours in the other two areas, with at least six hours in each area

Biology: Major concentration recommendations are Biology 111, 112, 313-313L, 321, and two courses from Biology 331, 332, 347, 235, or 215-215L. Minor concentration recommendations are Biology 111, 112, 331; if only six hours are elected, they should be Biology 111, 112.

Business: Major concentration recommendations are Accounting 107, Computer Science 125, Economics 101, Business Administration 265, and either of the following two options: Accounting 108 and Economics 102, or Business Administration 331, 332. Minor concentration recommendations are any combination of Accounting 107, Economics 101, Computer Science 125, Business Administration 265. Economics 101 is, however, strongly suggested.

Political Science: Major concentration recommendations are Political 117, 118, 308, 471. Minor concentration recommendations are Political Science 308, 471; if only six hours are elected, they should be Political Science 471.

GENERAL SCIENCE CERTIFICATION

Bachelor of Science

Elizabethtown College offers a secondary education certification program in general science which is designed to lead to a general science teaching certificate in secondary education with a major concentration in biology, chemistry, or physics. The program aims to develop a comprehensive background for teachers in order that they may be better qualified to teach science in the general science curricula of junior high and middle school programs. The requirements of each concentration include a broad exposure to the other sciences and to mathematics, as well as to the instruction and experience in teaching provided by the professional education sequence.

The specific requirements for each of the concentrations follow:

Biology: a minimum of 24 hours in biology which must include Biology 111, 112, 215 and 215L, 313 and 313L; one course selected from Biology 212, 331, 235, 332, 347, 341; one course selected from Biology 324–524, 321, 322–522; Chemistry 113, 114; Physics 203, 204; two courses from Earth Science 111, 107, 108; Mathematics 101–121, or 117–172, or 117–151; Psychology 105; Education 305, 225d, 310, 415, 225e, 473.

Chemistry: a minimum of 24 hours in chemistry which must include Chemistry 113, 114, 213, 214; and eight hours from among Chemistry 305, 315, 333, 341, 343, 344, 351, 352; Biology 111, 112; 2 courses from Earth Science 111, 107, 108; Physics 132, 231; Mathematics 101, 121, 122; Psychology 105; Education 305, 225d, 310, 415, 225e, 473.

Physics: a minimum of 24 hours in physics which must include Physics 132, 231, 232, 343, 404; five or more additional credits in physics and drawing; Biology 105, 106, or 108; Chemistry 101, 104; two courses from Earth Science 111, 107, 108; Mathematics 101, 121, 122; Psychology 105; Education 305, 225d, 310, 415, 225e, 473.

SOCIAL STUDIES CERTIFICATION

Bachelor of Science

The social studies certification program involves the student in two general areas of study. First, the student acquires a mastery of the various subject fields that are a part of social studies teaching. Secondly, the program requires training in the techniques of teaching, along with actual teaching experience in a social studies classroom. Upon successful completion of the requirements in these two areas, students are certified to teach social studies in secondary schools in Pennsylvania and, by reciprocal arrangements, in several other states.

The academic segment of the student's preparation calls for specified courses in economics, geography, history, political science, psychology, and sociology/anthropology. This background enables the student to prepare for teaching in all areas classified as the social studies in secondary schools. The student concentrates in depth in one of the areas. This concentration encourages thoroughness in understanding one area and also lays the groundwork for future graduate study in that subject.

Professional training in the skill of teaching is acquired through a college course on methods. In this course the student explores both the theory and the practical strategies of teaching. Finally, the student spends a semester actually teaching social studies in a secondary school classroom under the careful supervision of a competent secondary school teacher and a college professional who offer criticism, advice, and encouragement.

Detailed requirements for the social studies major follow:

Students must take one 24-hour major, two nine-hour minors, and two six-hour minors. All students must take the professional education sequence: Psychology 105; Education 305, 225d, 225e, 415, and 473.

Economics: The 24-hour major must include Economics 101, 102, and 18 elective hours in economics. The nine-hour minor comprises Economics 101, 102, and three elective hours in economics. The six-hour minor comprises Economics 101, 102.

History: The 24-hour major must include History 105, 201, 202, 390, one European history beyond 105; one non-United States, non-European history; and six elective hours in history. The nine-hour minor comprises History 105, 201, 202. The six-hour minor comprises History 105, 202.

Political Science: The 24-hour major must include Political Science 117, 118, 202, 205, 301, either 308, 330, or 340 series, and six elective hours in political science. The nine-hour minor comprises Political Science 117, 118, 205. The six-hour minor comprises Political Science 117, 118.

Psychology: The 24-hour major must include Psychology 105, 106, 213, 221, 225, 235, 322 and 370. The nine-hour major comprises Psy. 105 and six elective hours. The six-hour minor includes Psy. 105 and three elective hours in psychology.

Sociology/Anthropology: The 24-hour major must include Sociology 101, 201, 330, 332, Anthropology 202, and 9 hours planned in consultation with, and approved by the social studies advisers in the Departments of Sociology and Education. The nine-hour minor comprises Sociology 101, 201, and Anthropology 202. The six-hour minor comprises Sociology 101, Anthropology 202.

Education 305 Practicum in Secondary Education: Social Studies

4 credits. Experience with and demonstration of various styles and strategies in the teaching of social studies in the secondary school classroom; in-school observation and internship, or paraprofessional experience are a part of the course
Prerequisite Psychology 105; corequisite Education 225d

INTERNATIONAL STUDIES CONCENTRATION

Dr. Wayne A. Selcher, Director and program advisor

The International Studies Concentration comprises a cluster of foreign cultures, language, and international affairs courses with a largely contemporary focus. Serving as a complement to the academic major, this concentration provides the student with enhanced understanding of the conditions in the rest of the world which are just beginning to make themselves felt in the daily lives of Americans. In addition to the general liberal arts goal of broadening students' horizons of awareness of other peoples and places, the concentration provides a valuable complementary education for many career-oriented and pre-professional programs of study.

The concentration provides three principal categories of an international education: competency in a second language, knowledge of other cultures, and appreciation of global interdependence among nations.

The Business Department has an international studies concentration designed specifically for business majors. Details on this version can be obtained from the Business Department. The structure of the concentration for all other majors consists of:

1. Foreign language competency: 6 semester hours in conversation and composition beyond the intermediate level, or equivalent competency
2. Three required foundation courses (9 hours):
 - An 211 World Cultures
 - Ec 307 International Economics*
 - PS 205 International Relations
3. Four elective courses (12 hrs.), to be chosen from this list:
 - An 202 Cultural Anthropology
 - An 307 Peoples and Cultures of Africa
 - An 308 Peoples and Cultures of Latin America
 - Ec 308 Comparative Economic Systems
 - Fr, Ge, Sp 324 French, German, or Spanish Civilization
 - Geo 105 World Geography
 - Hi 205 Modern Far East

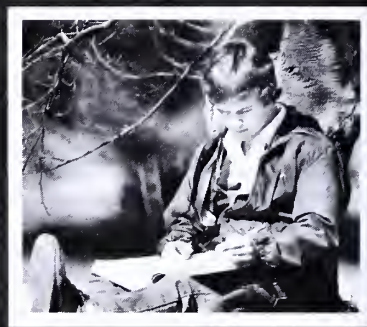
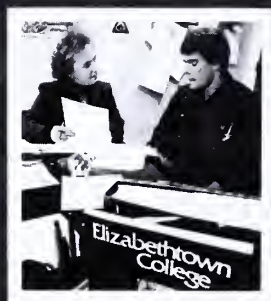
- Hi 216 English History since 1603
(Modern Britain)
- Hi 314 History of Soviet Russia
- Hi 318 Age of Anxiety
- Hi 323 History of China
- Hi 324 History of Japan
- Hi 327 History of Africa
- Hi 328 Modern Africa
- Hi 403 A History of United States Foreign Relations
- PS 301 Comparative Governments
- PS 305 American Foreign Policy
- PS 342 Politics of Developing Nations
- Rel 221 Western Religions
- Rel 222 Eastern Religions

Also: 370 courses which are approved by the International Studies Committee, such as Ec 371 Economic Development

*Prerequisite: Ec 101

In developing the concentration, the student can choose electives to develop a thematic emphasis such as regions of the world (e.g., Asia, developing nations), relations among nations, or a comparative perspective (e.g., on civilizations, religions, economics or politics). Study abroad is strongly encouraged. The Director of the International Studies Concentration (Professor Wayne Selcher), will help you with course selections. Courses taken for this concentration may be counted to fulfill the college graduation requirement in international education and for either core or major requirements (but not both). Completion of the concentration will be indicated on your college transcript.

Academic Regulations



Academic Regulations

REGISTRATION

Students are required to register for classes on those days designated on the college calendar. Students registering later than the days specified will be charged a late registration fee. A student may register either as a regular or a non-degree student, and as full-time or part-time. Regular students only are degree candidates, and they must be in an approved program.

A student registers for courses—not for a time or professor. There is no guarantee that a student will get every course at the time requested.

Pre-registration

Students pre-register for the fall semester at the beginning of April. To pre-register, students must have met all financial obligations, including the payment of the pre-registration deposit for the next semester.

Pre-registration for the spring semester usually takes place in late November. Master schedules and course request cards are furnished to the student approximately four weeks prior to this date, so there is ample time to make an appointment with the adviser.

Evening/Saturday students should check with the Office of Continuing Education for details about registration.

CHANGE OF REGISTRATION

Courses may be added within the first week of a semester and may be dropped without academic penalty during the first four weeks. Withdrawal from a class must be approved by the academic adviser and completed through the Registrar's Office.

THE STUDENT'S PROGRAM

Each student is responsible for knowing the applicable catalog materials; with this knowledge, and in consultation with their academic advisers, students should carefully prepare their programs.

After a freshman is admitted into the College, the work of the first two years is largely intended to fulfill the requirements of the General Education Core, which provides a broad education and enables the student to select a major wisely.

In the junior and senior years most curricula afford time for a wide range of electives in addition to the prescribed courses outlined for each year. Many courses have prerequisites, and students are reminded of their responsibility for taking courses in sequence. To change from one curriculum to another, the student must consult with a member of the counseling staff.

Since the completion of 128 semester hours of work is required for a bachelor's degree, a student who plans to graduate in four years must include an average of 16 semester hours for each of eight semesters. However, many students wisely elect to take a lighter academic load in order to do better work, and choose to attend a summer session or a part of a fifth year.

Overload credits

A student with average grades may carry up to 18 semester hours of work in any given semester except the summer session, when the maximum is 14 semester hours for the 10-week period. A student who has achieved a cumulative grade point of 3.00 or above may carry up to 20 semester hours credit in a semester, or 16 semester hours credit in a summer session. For each semester hour above 18 for which a student is enrolled in a given semester, an additional fee is charged, and approval by the Associate Dean of the Faculty is required. Students who wish to petition for an overload should obtain a form in the Registrar's office.

Full-time/part-time status

Any student taking 12 or more credit hours per semester at Elizabethtown College is considered a full-time student and will pay full tuition and fees. Any student taking 11 or fewer hours per semester will pay the regular semester hour rate plus applicable fees, and will receive a library card and full use of the library facilities. In a summer session students holding a Pennsylvania Higher Education Assistance Agency (PHEAA) grant are considered full-time if they carry a minimum of 12 semester hours divided among the terms. Tuition and fees are paid according to the schedule in the summer session brochure. For further details concerning summer session consult the summer session brochure available from the Registrar's or Continuing Education offices.

Class standing

The student's class standing is determined on the basis of the number of credits earned. After earning 30 credits, a student is considered a sophomore; with 60 credits a junior; with 90 credits, a senior.

CLASS ATTENDANCE

Class attendance is handled individually by the faculty members. It is the position of the College that the above average student should be given some freedom of judgment as to his attendance needs, while the below average student must, of necessity, be encouraged or required to maintain a record of regular attendance.

Each faculty member will announce his attendance policy at the start of each semester. A professor may dismiss a student from a course for excessive absences. A student may appeal for reinstatement to the Academic Standing Committee.

A student should take care of absences due to ill health or other personal problems through directly consulting the professor.

CREDITS, GRADES, AND QUALITY POINTS

Credit is indicated in terms of the semester hour. Each semester hour unit signifies work completed in one 50-minute recitation, or two or more 50-minute lab periods per week for a semester of 15 weeks, or an equivalent learning experience.

Grades are reported for work as follows: A, excellent; B, good; C, satisfactory; D, poor; F, failing; W, withdrawal from class; I, work incomplete. A grade of I may be obtained by making a formal request to the professor of the course in question. The student and the professor must sign a written agreement which specifies the nature and the quantity of the work to be completed and the projected date of completion. All grades of I received in the fall semester must be removed by April 1. Those received in the spring semester or summer session must be removed by October 1. Failure to do so results in a grade of F. A system of grade appeals may be found in the student handbook.

Quality points are given for credit as follows: for a grade of A, 4 per semester hour; B, 3 per semester hour; C, 2 per semester hour; D, 1 per semester hour; F, P, NP, and WF, no qual-

ity points. Credits earned off-campus in programs under the jurisdiction of the College, or approved by it, or both, while the student is matriculated at the College, are considered on-campus credits.

The student's rank in class at graduation is based on the credits, grades, and quality points earned at Elizabethtown College.

REPEATING COURSES

Courses which may be repeated (see below) must be taken at Elizabethtown College; the most recent grade is final and is used in the calculation of semester and cumulative averages. When repeating a course a student must file the appropriate repeat registration card in the Registrar's Office. Courses which may be repeated follow:

1. A student may repeat any course in which he has received an F or N.P.
2. Ordinarily a student may not repeat a course in which he has earned a grade of D. However, upon the request of the student's adviser and the approval of the department chairman of the student's major department, a student may repeat a course in his major, a course required by the major, or a course that is prerequisite to a general education core requirement. The "D" grade must be repeated within one transcript year of the original enrollment (or the next semester in which the course is offered if the course is offered less frequently than once a year).

PASS/NO PASS GRADING

Students may elect to take their required physical education courses on a pass/no pass basis. In addition, students may select one other course per semester to be graded in this manner under the following conditions:

1. A student who is in a bachelor's degree program must currently be of junior or senior standing (60 or more credits); a student who is in an associate degree program must currently be of sophomore standing (30 or more credits).
2. The cumulative average must be 2.75 or higher.
3. The selected course may carry no more than four semester hours of credit and must be a free elective. It must be outside the major department, may not satisfy a Core requirement, and may not be a course required by the major.

4. No more than four courses in total (excluding physical education) in the baccalaureate program, nor more than two courses in total (excluding physical education) in the associate degree program may be taken under this grading option.

INDIVIDUAL PROGRAM
ADJUSTMENTS

Academic departments reserve the right to counsel any student out of a program or major for academically related reasons. A student has the right to appeal such departmental action to the Dean of the Faculty, who will direct warranted appeals to the Academic Standing Committee.

ACADEMIC PROBATION

Academic probation means that a student is in danger of being dismissed from the College for academic reasons. Students who fall into the following categories are placed on academic probation:

<i>Semester hours in the College:</i>	<i>with</i>	<i>Cumulative Grade Point below:</i>
1-18		1.70
19-36		1.80
37-54		1.90
55-72		1.95
73 or more		2.00

It is recommended that students on academic probation limit their load to four courses or 13 semester hours, whichever is less, in any semester in which the probation exists. The summer maximum should be two courses per term.

ACADEMIC DISMISSAL

The College, upon recommendation from the Academic Standing Committee, may at any time dismiss from the College a student who is on academic probation. Students should be aware that all cases are handled individually by the College, and that very poor academic performance may result in dismissal at the end of any semester.

A student who is in academic difficulty or on academic probation may be requested by the Academic Standing Committee, in consultation with the student and advisers, to enroll in a special or particular program and to become

involved in testing, counseling, or other developmental activities. Satisfactory performance by the student in such assignments may be interpreted by the Academic Standing Committee as satisfactory progress, and may make it unnecessary for the Committee to dismiss a student.

READMISSION OF STUDENTS NOT IN
GOOD ACADEMIC STANDING

A student who left the College while in academic difficulty (below 2.0 cumulative GPA) must petition the Academic Standing Committee, through the Office of the Dean of the Faculty, for readmission.

A student who has been readmitted to the College after an absence from the College of *five-successive years* may, upon fulfilling certain requirements, have previous grades of "F" removed from the cumulative grade point average. For full information the student should consult with the College Registrar.

VOLUNTARY WITHDRAWAL FROM
COLLEGE AND CLASSES

Withdrawal from college

Full-time students withdraw from the College through the Center for Counseling and Student Development; part-time students withdraw through the Registrar's Office. For purposes of billing, room reservation, and academic responsibility, the effective date of withdrawal will be the date on which the completed official notice is returned to the Center for Counseling and Student Development or the Registrar's Office. A student who withdraws without notification will receive no refund and may incur the full room penalty. Failure to comply with withdrawal procedures may result in loss of the privilege of re-admission to the College and the right to the release of a transcript of credits earned.

Withdrawal from classes

Students withdraw from classes through the Registrar's Office. The appropriate form must be signed by the student's adviser and the professor for the course. The course will not appear on the permanent record if the student withdraws on or before the end of the fourth week of the semester. From this time to the end of the eleventh week, a withdrawal will result either in a grade of W or W/F. All with-

drawals after the end of the eleventh week of the semester receive grades of W/F unless the withdrawal is for medical reasons, in which case a W will be recorded. A grade of W/F is calculated into the student average as though it were an F.

INTERNSHIPS

Some academic departments offer internships for credit as part of approved academic programs. Other types of internships may be initiated by the individual student or be offered by other educational institutions, agencies, businesses or organizations. For such internships the College publishes special guidelines, copies of which are available from the Registrar or Department chairman. Students are advised that the College will not grant academic credit or recognition for such internships without *prior* approval by the appropriate faculty member and administrative officer.

LEAVE OF ABSENCE

A student may take a leave of absence from the College to study abroad in the BCA program.

To arrange a leave, a student should contact the faculty coordinator or director of the appropriate program. Application must be made no later than the pre-registration period of the semester prior to the one in which the leave begins. Any administration fees for off-campus programs are payable at the time a student applies for the leave. A leave is approved upon the student's acceptance into the program.

Pre-registration information will be sent to students on leave approximately by March 15 or October 15. The pre-registration card and a \$100 deposit must be returned to the Registrar's Office by May 1 to ensure a place in the College and in the courses selected.

COLLEGE SCHOLARS

Students who, having taken at least 60 credits at Elizabethtown College, have maintained a 3.75 cumulative quality point average, will be recognized as College Scholars for the succeeding academic year. They will be awarded a special certificate and their status as College Scholars will be recorded on their permanent records. No graduating seniors will be named College Scholars since a 3.75 average makes them eligible for *magna cum laude* or higher honors at the commencement exercises.

DEAN'S LIST

A student who earns a quality point-credit ratio of 3.50 or better is regarded by the College as having performed with distinction, and that student is placed on the Dean's List of Honor Students for the semester.

SCHOLAR'S PRIVILEGE

Any full-time student who appeared on the Dean's Honor List during the preceding semester may, with the permission of the instructor, attend any class in the College on a space available basis as a scholar's privilege without registration or credit.

DEPARTMENTAL STUDENT PRIVILEGE

Any full-time or part-time junior or senior student may, with the permission of the instructor, attend any class within his major department on a space available basis.

AUDITING COURSES

Students in good academic standing (2.0 or better) may elect to audit courses provided: (1) they do not pre-empt regularly enrolled students; (2) they have the permission of the professor teaching the course. Audit hours are included in the total hours to determine full-time status and overload charges. A fee is charged on a per credit-hour basis for part-time students who wish to audit courses. Auditors, both full-time and part-time, must also pay any additional fees for labs, studio supplies, and so forth.

Students may add a course for audit or change a course registration from audit to credit during the first week of class only. Change of course registration from credit to audit cannot be made after completion of the fourth week of the semester. Once a course has been audited, it may not be taken for credit. Likewise, a course that has been completed for credit may not be repeated and recorded as an audit course.

The requirements for the audit will be determined by the professor. Upon completion of all such requirements, the audit will be posted on the student's permanent record card. Audit courses carry neither academic credit or grade.

CREDIT BY EXAMINATION

Three ways exist for regularly admitted students to receive academic credits and/or advanced placement by examination: (1) the College Entrance Examination Board's Advanced Placement Program (CEEB), (2) the College-Level Examination Program (CLEP), and (3) successful achievement on an Elizabethtown College faculty examination (Challenge Testing).

CEEB ADVANCED PLACEMENT EXAMINATIONS

The College, with the approval of the department concerned, grants advanced placement and credit to students who perform satisfactorily on a CEEB Advanced Placement Examination.

CLEP EXAMINATIONS

Credit is awarded for appropriate scores on the CLEP examinations according to the following guidelines.

1. General Examinations

Persons who have completed high school (or its equivalent) more than 3 years ago may be awarded Elizabethtown College credits according to the following standards.

- a. All General Examinations must be successfully completed prior to the achievement of sophomore status (30 or more semester hours of recorded college credit).
- b. Up to 29 semester hours of credit may be awarded for scores at the fiftieth percentile or better on the General Examinations. None of the credits may duplicate college credits already recorded on the transcript or credits for course work in process at the time of the examination.
- c. For the Natural Science Examination, a maximum of eight credits will be awarded for scores at or above the fiftieth percentile. Four of these credits may be applied to the General Education core requirements in science.
- d. For the examination in English Composition, Humanities, and Social Sciences and History, a maximum of six credits for each examination will be awarded for scores at or above the

fiftieth percentile. Up to three credits from each area may be applied to the corresponding requirement in the General Education Core requirements.

- e. For the Mathematics Examination, a maximum of three credits will be awarded for scores at or above the fiftieth percentile. These credits may not be applied to the General Education Core requirement in mathematics.

2. Subject Examinations.

Credit will be granted for scores at or above the fiftieth percentile. Subject Examinations in an area in which the student will take additional work (either by requirement or elective) must be successfully completed prior to enrolling in college courses in that subject area.

CHALLENGE TESTING

Challenge Testing is a comprehensive term encompassing all tests prepared for the regularly admitted student by Elizabethtown College faculty. There are two types of Challenge Tests: Tests for Academic Credit, and Tests for Placement and/or Waiver.

Tests for Academic Credit are of two kinds: *Proficiency Tests* such as the swimming proficiency test; and the *Challenge Exams* in which a regularly admitted Elizabethtown College student requests to be examined for credit in a particular course from the College catalog. Requests for Challenge Exams must be approved by the chairman of the department in which the course is listed. Practicums, internships, and research courses are excluded from the Challenge Exam option.

Tests for Placement and/or Waiver comprise tests such as those given for placement in English, modern languages, mathematics, or typing. No credit is awarded for such testing.

All Challenge Testing is graded on a pass/no pass basis. A grade of "pass" indicates that the credit and/or advanced placement is to be awarded.

The fee for a Test for Academic Credit is \$50. The fee is for the test itself and is charged without regard to the test results. A fee of \$25 is charged for Tests for Placement and/or Waiver. Challenge Tests given at the initiative of the College are administered without fee to the student.

TRANSFER OF CREDITS

Students wishing to transfer credits to Elizabethtown College should obtain a permission form in advance from the Registrar's Office. The College will normally transfer credit (but not grades or quality points) for course work taken at another regionally accredited institution for which a grade of C or better was obtained.

Students who have achieved junior status (60 credits) either through work at Elizabethtown College or through a combination of work at the College and another institution are not permitted to transfer additional credits from a two-year institution to the College. Such students may transfer credits from four-year institutions, but only upon the prior approval of the Registrar. Students must request the Registrar's Office of the transferring institution to send an official transcript to the Registrar's Office at Elizabethtown College.

Students desiring to transfer credits from Elizabethtown College to another institution must make the request in writing to the Registrar's Office, in person or by mail, at least one week prior to the date needed.

GRADUATION REQUIREMENTS

Credit Requirements

To receive a bachelor of arts or bachelor of science degree from Elizabethtown College, the student must earn 128 semester hours credit, or in the case of engineering, medical technology, and other special programs, the number indicated in the course outline, including all of the specific courses indicated, the General Education Core requirements, and the requirements for the major field.

To receive an associate of science degree with a major in medical secretarial science, the student must earn a minimum of 64 credits including 28 credits of General Education Core courses, six credits of free electives, and the specific courses required by the major.

Grade Point Average

In order to be eligible for graduation, students must have a quality point-credit ratio of at least 2.00 with a minimum average of 2.00 in the major. Students transferring from other colleges must have a ratio of at least 2.00 in courses pursued in residence at Elizabethtown College.

On-Campus Credits

To meet graduation requirements, the student must earn on-campus credits as follows: 1) a minimum of 15 credits in the major, at least eight of which are at the upper level (normally 300 and 400-level), and 2) at least 30 of the last 60 credits.

Graduation with Honors

At the time of his graduation, a student who has achieved a cumulative quality point-credit ratio of 3.50 will be graduated cum laude; a ratio of 3.75, magna cum laude; a ratio of 3.90, summa cum laude.

Transfer students will receive honors if they have earned a minimum of 60 semester hours credit at Elizabethtown College, if they are recommended for honors by the major department, and if their averages meet the above requirements.

Other Requirements

Graduation requirements will be governed by this catalog and the Program Guide Book issued by the Registrar dated four years prior to a student's graduation (two years in the case of associate degree students), or by the catalog in effect at the time of graduation if the student so chooses.

Transfer students are subject to the requirements of the catalog in effect when they begin studies at Elizabethtown College. Students coming from two-year institutions may choose to be governed by the catalog dated four years prior to their graduation if they can present evidence that they planned to transfer to Elizabethtown College when they matriculated at the two-year college.

Elizabethtown College will graduate only those students who have met the moral and financial obligations incurred in pursuit of their studies. The completion of the required number of semester hours does not in itself constitute eligibility for graduation.

The Office of the President must be notified by anyone who plans to be graduated in absentia.

It is the responsibility of the candidate for a degree in December, May, or August to make formal written application for the degree to the Registrar by September 15 or February 15.

Campus Life



Campus Life

CO-CURRICULAR EXPERIENCES

Because the education of students takes place in a variety of ways, their cocurricular life is a vital and integral part of the college experience. Through participation in the many clubs and organizations approved and sponsored by the Student Senate, in academic departments, the performing arts, and intercollegiate and intramural athletics, students have the opportunity to express individual interests, to grow in their understanding of the various academic disciplines, to develop leadership skills, and to enrich their liberal education.

Honorary Organizations

Alpha Lambda Delta
Alpha Psi Omega
Delphi Society

Clubs and Organizations

Accounting Club
Advocates for Peace
Black Student Union
Brethren Student Fellowship
Commuter Council
Campus Gold
Elizabethtown Christian Fellowship
Eta Phi Sigma (Forensics)
International Club
Newman Club
Outdoor Club

Departmental Clubs

Accounting
Alpha Mu (Music Therapy)
American Chemical Society
Biology
Education Club
History
Marketing
Mathematics
Modern Languages
Occupational Therapy
Political Science
Pre-Health Progressions
Psi-Chi
Psychology
Religion/Philosophy
Society of Physics Students
Society for the Advancement of Management (S.A.M.)
Sociology/Social Work
Student Pennsylvania State Education Association
Supreme Fiction Society
Volunteer Club

Performing Arts

Choral Union
College Chorale
College Community Orchestra
Concert Band
Concert Choir
Jazz Band
Repertory Theatre
Sock and Buskin
String Ensemble
Pep Band
Student Team of Entertainers and Performers (S.T.E.P.)

Lectures and Concerts

The College presents annually a varied program of music, dance, drama, films, and lectures, featuring distinguished artists and speakers. Student organizations in the performing arts, individual student recitals, and speakers in various student organizations not only provide further entertainment and instruction, but also permit participation of interested students.

Student Government

The Student Senate is the student arm of the College's campus government. Students are elected each spring on a representative basis from residence halls, academic departments, and off-campus residences. Student senators are responsible for assuring a student voice in the Community Congress, the College's governance structure, and for allocating funds for student activities, and organizations.

Activities Planning Board

The Activities Planning Board is composed of students who work with the Director of Student Activities to plan weekend and general campus social activities for the college community.

STUDENT PUBLICATIONS AND COMMUNICATIONS

Opportunity for self-expression is provided through the various student publications and radio communications:

The Etownian is a weekly newspaper published by students and available to all members of the college community.

The Conestogan is the college yearbook published annually and available each fall.

WWEC, the college radio station, managed by the Communication Arts Department, broadcasts daily under the operation of a student staff. News of general campus interest, special features, and various types of music are carried at 640 on the AM band.

The Rudder, the student handbook and its supplement, is published by the Office of Student Affairs with the assistance of interested students. *The Rudder* serves as a guide and reference providing up-to-date and essential information about student life and services as well as many of the policies, rules, and regulations governing student life.

ATHLETICS

Elizabethtown College provides a varied intercollegiate and intramural sports program. It adheres to the principles and policies of the various athletic conferences of which it is a member.

Conference Membership

Men: National Collegiate Athletic Association (NCAA)

Eastern Collegiate Athletic Conference (ECAC)

Middle Atlantic Conference (MAC)

Women: National Collegiate Athletic Association (NCAA)

Middle Atlantic Conference (MAC)

Facilities

The Alumni Physical Education Center houses offices, classrooms, and the Thompson Gymnasium. With seating capacity for sporting events for 2400 spectators, the configuration of the gym may be modified to provide three basketball courts, eight badminton courts, four volleyball courts. There are also three racquetball/handball courts, a remedial gym, and a wrestling room. Other facilities include the swimming pool and bowling lanes in the Baugher Student Center.

Outdoor facilities include two soccer fields, a field hockey field, a baseball field with dugouts, a softball field, eight all-weather tennis courts, and an intramural field.

Intercollegiate Program

The sports program attracts many skilled athletes on an intercollegiate level. Intercollegiate sports for men include:

Soccer (varsity and J.V.)

Basketball (varsity)

Wrestling (varsity)

Swimming (varsity)

Baseball (varsity)

Tennis (varsity)

Cross-country

Intercollegiate sports for women include:

Field Hockey (varsity and J.V.)

Volleyball (varsity and J.V.)

Basketball (varsity and J.V.)

Swimming (varsity)

Tennis (varsity)

Softball (varsity)

Cross-country

Intramural Program

Recognizing the importance of sports participation regardless of the level of a participant's skill, the College maintains a broad intramural athletic program for men and women, arranged and directed by the Director of Intramural Sports working with interested students. Intramural teams are selected from residence halls, faculty, alumni, and commuters. If there is sufficient interest several leagues are organized, according to ability levels.

Activities offered regularly:

- Flag Football (men)
- Tennis (men, women)
- Bowling (coed)
- Volleyball (men, women, coed)
- Racquetball (men, women)

If there is sufficient interest other activities will be added. For example:

- Tennis (coed)
- Basketball (women, coed)
- Handball (men)
- Chess, (men, women)
- Softball (men, women, coed)
- Wrestling (men)
- Water Polo (men, women)
- Table Tennis (men, women)
- Badminton (men, women)
- Swimming (men, women)
- Lacrosse (men, women)

STUDENT SERVICES

Freshmen Orientation Programs

The orientation programs help students learn about the academic community and student life at Elizabethtown College. This education begins with the original mailings to accepted students and their meetings with college personnel, and continues throughout their initial experience on the campus.

Summer Orientation

All freshmen and their parents are invited to attend one of several orientation programs during the summer. During their stay on campus students and parents meet college administrators, faculty, and student leaders through a variety of seminars on college life. Students also meet individually with academic advisers to plan their fall schedule of classes.

Fall Orientation

Orientation continues in the fall when freshmen are required to arrive a few days before the upper classmen. During this orientation considerable attention is given to three areas: educational programs and requirements, college facilities, and social adjustment.

Student Center

The Baugher Student Center houses many student services and facilities. The first floor contains the Jay's Nest snack bar, alumni auditorium theatre, college swimming pool, post office, bookstore, bowling alleys, and informal lounge, as well as commuter students' lockers and student mail boxes.

The second floor houses offices for the Dean of Student Affairs, Center for Counseling and Student Development, College Chaplain, Financial Aid, Housing, Public Information, Reber Conference Room, Commuter Lounge and Study, *The Etownian* and WVEC.

Commuter Services

Commuters are provided with a multi-purpose room adjoining study room located on the south end of the second floor of the Baugher Student Center. The Commuter Council is the official representative body of the commuter student. The Commuter Council has as its adviser the Administrative Assistant to the Director of Housing.

Center for Counseling and Student Development

The Center for Counseling and Student Development supports and assists individuals in their educational, personal, and social development. In educational development the Center helps students to develop effective study skills, to clarify academic and educational goals, and to choose majors. To facilitate exploration of those interests, aptitudes, and abilities which lie behind important academic decisions, the Center uses diagnostic tests and measurements. In personal and social development, the Center helps the student to explore and understand personal identity, attitudes, values, and motivations. Counseling sessions are considered confidential.

Counselors are also responsible for the academic advising of students who have not chosen a major. The staff also conducts a series of small group experiences in a variety of interest and need areas. Interpersonal communication, stress control, assertiveness, time

management, and human potential are some of the topics explored in past experiences. Counselors are available for consultation to all members of the college community. The Center for Counseling and Student Development is located in the Baugher Student Center.

Tutor Center

A tutoring service is available to any student experiencing academic difficulty in any course. Students are encouraged to use this service to maintain good academic standing and may sign up at the Wenger Center.

Writing Laboratory

The Writing Laboratory provides individual assistance to students who have immediate and long-term writing problems; it is located in Wenger Center.

Reading/Study Skills Center

The Reading/Study Skills Center provides individualized instruction in study skills and reading comprehension: effective techniques for note-taking from lectures and textbooks, methods of studying for exams and taking them, flexible reading rates and other reading problems. The Reading/Study Skills Center is located in Wenger Center.

Student Health Center

The College Health Center provides health care for the student population and emergency care for the college community. The Health Center treats minor illnesses and injuries, and encourages health education by offering health-related programs throughout the year. It also handles insurance claim forms for those students who subscribe to the Student Health and Accident Insurance.

Registered nurses are on duty 8:00 a.m.–8:00 p.m. Monday through Friday, and brief office hours are available on Saturday morning. Physician hours are also scheduled. All other hours are covered by an emergency “on call” system. The Health Center refers students to physicians in the community although, of course, students may choose the physician they wish to see. Referrals are also made to other community agencies.

Before registering for freshman classes, students entering Elizabethtown College should file the report of a physical examination and proof of a tuberculosis test performed by their physician. The College will send health forms for physical examination to all inquiring students. The Health Center is located on South Mount Joy Street.

Career Development Center

The Career Development Center is designed to assist students with their career planning, development, and job placement. The office houses a career library, maintains placement credentials, provides off-campus summer and part-time job listings, coordinates on-campus recruitment (business, industry, government, school districts, and graduate school visitations), and publishes a semi-monthly newsletter. The staff conducts and sponsors workshops, clinics, and seminars on various topics, e.g., career decision-making, career planning strategies, employability skills, and finding a job.

Extern Program

Each year, during one week in January, the Career Development Center conducts an Extern Program in concert with the Office of Alumni Relations. The program is designed to help a student choose a particular academic major, confirm a chosen academic major, establish more concrete career goals, or provide a brief on-the-job experience.

The program matches Elizabethtown College students with alumni sponsors who work with the student externs over the designated period of time. The externs receive no academic credit or salary; they do receive valuable first-hand experience in their field.

Campus Ministry

Because the student body of Elizabethtown College comprises individuals from many different religious backgrounds, programs sponsored by the Chaplain's Office are ecumenical in nature.

Major campus-wide religious programming is the responsibility of the Religious Life Committee, a representative body convened by the Chaplain and composed of 12 individuals who represent faculty, administrators, the various organized religious clubs, and the denominational groups on campus. Programs planned by the Chaplain's Office in cooperation with the Religious Life Committee have included such activities as a Jewish Seder, Church of the Brethren Love Feast, emphasis on World Hunger, Bible study, sharing groups, Christian Concerts, Religious Emphasis Week, and a regular Sunday morning worship service.

Organized religious groups on the campus include Brethren Student Fellowship, Elizabethtown Christian Fellowship, the Newman Club, Advocates for Peace, and Helping Hands.

CAMPUS RESIDENCES

Accommodations

All six of the campus residence halls feature double occupancy rooms, lobby areas, laundry facilities, and areas for recreation and general student use. Students of all classes and various majors reside in each hall.

Founders Residence was completed in 1971, houses 328 men and women in four separate living areas (Beahm, Falkenstein, Hertzler, Zeigler Houses), and features small group living suites.

Schlosser Residence, built in 1965, houses 206 women, and features small group suites with carpeting and air conditioning throughout.

Myer Residence was completed in 1957, houses 130 women, and contains the campus dining room.

Royer Residence, dedicated in 1962, houses 133 women.

Ober Residence, built in 1960, houses 247 men in two wings.

Brinser Residence, dedicated in 1965, houses 144 men.

Campus Residences

In addition to the residence halls, there are three Cooperative Houses for selected groups of senior students only. The Cooperative Houses offer alternative small group living arrangements to meet the needs of seniors in their last semesters of college. In the houses, housekeeping chores are shared, food budgeting and preparation are a part of everyday life, and small group activities are planned by house members. Membership in the houses is determined by selecting groups of seniors who can promote and live in a cooperative setting.

Closings

The College will close all of its housing units during all official vacation periods. There will be no access to the buildings during these times.

Four-Year Room Contract

All full-time students who are not residing with parents, legal guardians, or their spouses will be expected to live in campus-owned housing for their entire academic career. The College feels that the experience of living on campus contributes significantly to a student's educational and social growth. Exceptional circumstances may be reviewed by the Housing Contract Review Committee.

Housing Office

The Housing Office is located on the second floor of the Student Center. The Director of Housing and Assistant Director coordinate all housing arrangements and the entire residence hall program.

Within each residence hall, there is a Head Resident who is responsible for supervising the resident assistant staff, advising the residence hall council, and caring for the general welfare of all students in the residence hall.

On each floor of every residence hall, a selected upperclass student called a Resident Assistant lives and works with the students. The Resident Assistant's responsibilities include initiating programs, serving nightly duty, handling administrative functions, and assisting in the enforcement of College and residence hall policies.

Each residence hall has a Residence Hall Council, made up of students elected from each floor. Their primary responsibilities are to promote student involvement in hall matters and programs, to channel students' concerns to appropriate departments, and to plan academic, cultural and social programs for the residents.

A Residence Hall Central Council is a second elected student group which is responsible for distributing college allocated funds to the Residence Hall Councils. The Residence Hall Councils must prepare a proposal and budget for desired programs and request money through the Central Council.

STUDENT RIGHTS AND RESPONSIBILITIES

Membership in the Elizabethtown College community accords the student certain privileges and rights along with accompanying responsibilities. In an effort to ensure and protect the right to pursue the educational process, the college community as a whole must be sensitive to the welfare and behavior of its individual members.

The student assumes responsibility for awareness of and compliance with all existing rules, policies, public laws, and regulations as stated in the college catalog, student handbook, and any other official publication of the College. All new students receive a copy of *The Rudder*, the student handbook, during new student orientation.

Family Educational Rights and Privacy Act of 1974

Elizabethtown College affirms the Student's Family Rights and Privacy Act (the Buckley Amendment) which protects students' rights of access to any college records directly relating to them. Guidelines are found in the student handbook.

Title IX of the Educational Amendment Act of 1972

Elizabethtown College supports the Title IX statute which prohibits sex discrimination in any educational program or activity receiving federal financial assistance. A Title IX Committee exists to ensure compliance with the statute. A grievance procedure for Title IX concerns is outlined in the student handbook.

THE JUDICIAL SYSTEM

The Campus Judicial Board and the Appeals Board, composed of students, faculty, and administrators, have jurisdiction over violations of campus rules, policies, and regulations. The College embraces the principles of due process and individual student responsibility, and therefore initial efforts to settle violations are made individually at the lowest level of responsibility. Only when the matter cannot be resolved on a lower level is it referred to the appropriate board.

Alcohol

The College supports the statutes of the Commonwealth of Pennsylvania controlling the possession and use of alcoholic beverages by individuals under 21 years of age. It is contrary to the policy of the College for students of any age to purchase, possess, store, sell, or consume alcoholic beverages while under college jurisdiction.

Drugs

The College supports the local, state, and federal laws which make the possession, purchasing, distribution, and use of certain drugs illegal. Neither the College nor its students enjoy immunity from the statutes or their enforcement. Disregard of public laws by students on campus is a serious violation of college policy and regulations.

Firearms, Weapons

Use of firearms, weapons, explosives, or noxious chemicals except in strict adherence to the laws of the Commonwealth of Pennsylvania or as part of the student's formal education is prohibited. Any weapons, firearms, or ammunition brought to the campus must be registered and deposited with the Department of Public Safety.

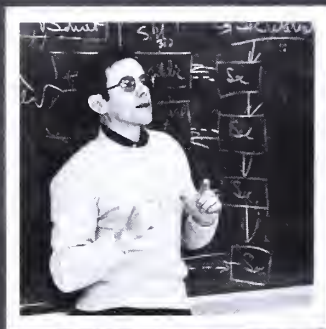
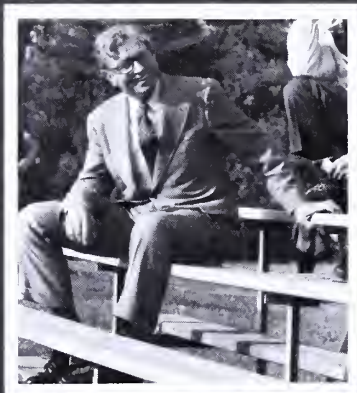
Motor Vehicles

Students are permitted motor vehicles on campus. All motor vehicles must be registered with the Department of Public Safety. Student must obtain parking decals and are bound by the motor vehicle regulations set forth in the manual published by the Department of Public Safety and distributed at registration time.

Smoking

For reasons of personal health, the College does not encourage the use of tobacco. Smoking is prohibited in classrooms, hallways, the dining room, the snack bar, lounges, and other places open to public gatherings, except residence halls.

Directory



Directory

THE FACULTY

Mark C. Ebersole, *President*

B.S., LL.D., Elizabethtown College; B.D., Crozer Theological Seminary; M.A., University of Pennsylvania; Ph.D., Columbia University (1977)

J. Thomas Dwyer, *Acting Dean of the Faculty,* Professor of English*

A.B., M.A., Ph.D., University of Pennsylvania (1960)

Frederick F. Ritsch, *Dean of the Faculty***

B.A., M.A., Ph.D., University of Virginia (1984)

Emeriti

Charles S. Farver-Apgar, *Professor of Biology, Emeritus*

B.S., M.S., Ph.D., University of Pittsburgh (1946)

Carl J. Campbell, *Professor of English, Emeritus*

A.B., Franklin and Marshall College; M.A., University of Pennsylvania (1962)

Clarence G. Enterline, *Alumni Secretary and Director of Placement, Emeritus*

B.S., Albright College; M.S., University of Pennsylvania (1956)

Nevin W. Fisher, *Professor of Music, Emeritus*

Graduate, Blue Ridge College; Teachers' Certificate, Peabody Conservatory of Music; B.M. Eastman School of Music, University of Rochester; M. Music, Northwestern University (1951)

Elizabeth M. Garber, *Professor of Political Science, Emerita*

A.B., LL.D., Hood College; M.A., George Washington University; Docteur de l'Université, University of Paris (1966)

Vera R. Hackman, *Dean of Women, Emerita*

A.B., Elizabethtown College; A.M., Columbia University; Professional Diploma, Teachers' College, Columbia University; L.H.D., Elizabethtown College (1944)

Ira R. Herr, *Professor of Physical Education, Emeritus*

A.B., Franklin and Marshall College; University of Pennsylvania; Temple University (1928)

Kathryn Nisley Herr, *Assistant Professor of Modern Languages, Emerita*

A.B. Lebanon Valley College (1943)

Earl H. Kurtz, *Treasurer Emeritus*

B.S., Elizabethtown College; M.A., New York University; Ped.E., Elizabethtown College (1957)

Morley J. Mays, *President Emeritus*

A.B., Juniata College; A.M., University of Pittsburgh; Ph.D., University of Virginia; D.D., Bethany Theological Seminary; L.L.D., Elizabethtown College; L.H.D., Albright College (1966)

O. F. Stambaugh, *Professor of Chemistry, Emeritus*

B.S., Lebanon Valley College; M.S., Ph.D., Pennsylvania State University (1946)

Carl W. Zeigler, *Professor of Religion and Philosophy, Emeritus*

A.B., Elizabethtown College; M.Div., United Theological Seminary; D.D., Elizabethtown College (1959)

Professors

Edgar T. Bitting, *Professor of Business*

B.S., Elizabethtown College; M.B.A., University of Pennsylvania; C.P.A. (1952)

Ernest A. Blaisdell, Jr., *Professor of Mathematics*

B.A., M.A., University of Maine; Ph.D., Temple University (1968)

I. L. Bossler, *Professor of Mathematics*

B.S., Ursinus College; M.S., Purdue University (1959)

John A. Campbell, Jr., *Professor of English*

B.S., M.A., Ph.D., University of Florida (1968)

Anna M. Carper, *Director of the Library*

A.B., Elizabethtown College; M.S., Columbia University (1960)

Eugene P. Clemens, *Professor of Religion and Philosophy*

B.A., Goshen College; M.A., Ph.D., University of Pennsylvania (1965)

J. Thomas Dwyer, *Professor of English*

A.B., M.A., Ph.D., University of Pennsylvania (1960)

J. Robert Heckman, *Professor of Biology*

B.S., Elizabethtown College; M.Ed., Millersville State College; Ph.D., Pennsylvania State University (1964)

Jack L. Hedrick, *Professor of Chemistry*

B.S., Elizabethtown College; M.S., University of Pittsburgh (1963)

Frederic E. Hoffman, *Professor of Biology and Clinical Professor in Science*

B.A., M.S., Ph.D., Syracuse University (1969)

*Through December 31, 1983

**Effective January 1, 1984

Note: year indicates date of appointment at the College.

A. F. Kish, *Professor of Business, Program Director, Continuing Education*

B.S., Rutgers-The State University; M.S., University of Delaware (1963)

Donald E. Koontz, *Professor of Mathematics*

B.S., Juniata College; M.A., Pennsylvania State University; Ed.D. Temple University (1961)

J. Kenneth Kreider, *Professor of History, Department Chairman*

A.B., Elizabethtown College; M.A., Ph.D., Pennsylvania State University (1964)

Henry M. Libhart, *Professor of Art, Department Chairman*

A.B., Franklin and Marshall College; Equivalent Master's Degree certificate, Commonwealth of Pennsylvania (1959-64, 1967)

Richard L. Mumford, *Professor of History and Clinical Professor in Social Science*

A.B., University of Pennsylvania; M.Ed., Ph.D., University of Delaware (1965)

Rollin E. Pepper, *Professor of Biology*

A.B., Earlham College; M.S., Syracuse University; Ph.D., Michigan State University (1964)

Zoe G. Proctor, *Professor of Chemistry*

B.S., Elizabethtown College; M.S., Bucknell University (1959)

William V. Puffenberger, *Professor of Religion and Philosophy*

B.A., Bridgewater College; B.D., Bethany Theological Seminary; Ph.D., Boston University (1967)

John P. Ranck, *Professor of Chemistry*

B.S., Elizabethtown College; M.A., Ph.D., Princeton University (1963)

D. Paul Rice, *Professor of Education*

A.B., Elizabethtown College; M.S., Ed.D., Temple University (1963)

Jobie E. Riley, *Professor of Communication Arts*

B.A. Manchester College; M.Div., Bethany Theological Seminary; Ph.D., Temple University (1961)

Austin D. Ritterspach, *Professor of Religion and Philosophy*

B.A., Indiana University; M.Div., Union Theological Seminary; Ph.D., Graduate Theological Union (1967)

Wayne A. Selcher, *Professor of International Studies, Department Chairman of Political Science and Director of International Studies*

A.B., Lebanon Valley College; M.A., Ph.D., University of Florida (1969)

Ronald L. Shubert, *Professor of Mathematics, Department Chairman*

B.S., Elizabethtown College; M.A., University of Kansas; D.Ed., Pennsylvania State University (1964)

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B.S., Columbia University

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**Through December 31, 1983*

***Effective January 1, 1984*

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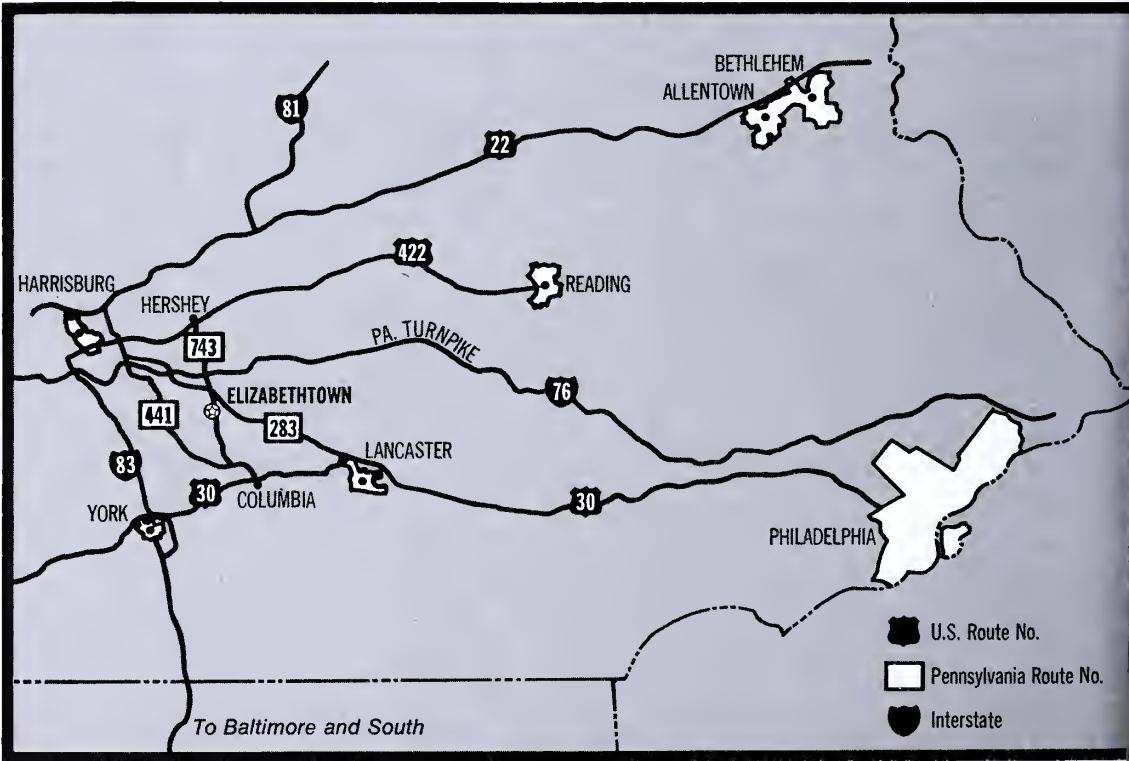
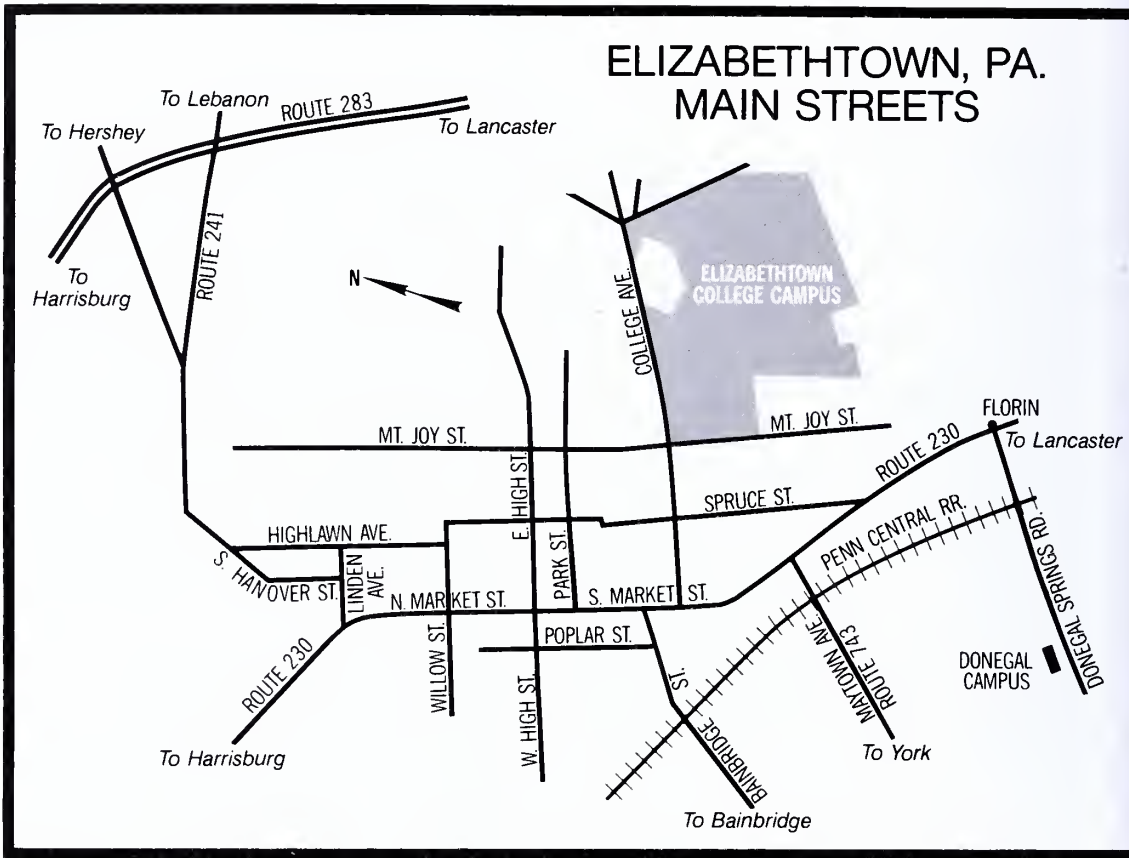
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ELIZABETHTOWN, PA. MAIN STREETS



Elizabethtown College



A Choice
for
Quality



Catalog: 1985-1987

Correspondence Directory

Elizabethtown College
Elizabethtown, Pennsylvania 17022
717/367-1151

<i>Office</i>	<i>Building</i>	<i>Telephone Extension</i>
Office of Admissions David B. Conway, <i>Director</i>	Leffler House	164
Office of Athletics D. Kenneth Ober, <i>Director</i>	Thompson Gymnasium	137
Office of Business Affairs	Alpha Hall	218
Office of the Director of Conferences Tana L. Parrett, <i>Director</i>	Alpha Hall	246
Office of the Vice President for Development James H. Brucker, <i>Vice President</i>	Alpha Hall	155
Office of Continuing Education J. Henry Long, <i>Associate Dean</i>	Nicarry Hall	291
Office of the Dean of the Faculty Frederick F. Ritsch, <i>Dean</i>	Alpha Hall	187
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Office of the Dean of Student Affairs Walter B. Shaw, <i>Dean</i>	Baughner Student Center	196
Office of the Treasurer John M. Shaeffer, <i>Treasurer</i>	Alpha Hall	181

Elizabethtown College



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Elizabethtown College is accredited by the Middle States Association of Colleges and Secondary Schools.

Students are to be governed by the policies and provisions contained in this catalog, subject to the right of the trustees, administration, and faculty to repeal, change, or amend them at any time.

Elizabethtown College is in compliance with the requirements of Title VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and all other applicable, federal, state, and local statutes, ordinances, and regulations. Elizabethtown does not engage in illegal discrimination against students, prospective students, employees, or prospective employees on the basis of race, color, religion, ethnic or national origin, personal handicap, age, or sex.

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Calendar 1985-86

FALL SEMESTER

August	26-30	Faculty Meetings and Orientation
	31	Freshmen Arrive
September	2	Labor Day—No Classes
	3	Upperclassmen Arrive Registration Day
	4	Classes Begin Opening Convocation
	28	Parents Day
October	12	Homecoming
	18	Break Day—No Classes
	23	Midterm
November	27	Thanksgiving Recess Begins 2:00 PM
December	2	Classes Resume 8:00 AM
	11	Friday Schedule of Classes
	13	Classes End
	14	Reading Day—No Classes
	16-20	Final Exams

SPRING SEMESTER

January	13-17	Faculty Meetings and In-Service Programs
	20	Registration Day
	21	Classes Begin
February	19	Reading Day—No Classes
	28	Spring Recess Begins 5:00 PM
March	10	Classes Resume 8:00 AM
	14	Midterm
	27	Easter Recess Begins 5:00 PM
	31	No Day Classes
April	1	Classes Resume 8:00 AM Monday Schedule of Classes
May	8	Friday Schedule of Classes Classes End
	9	Reading Day—No Classes
	10-14	Final Exams—Day
	17	Commencement

SUMMER SESSIONS

May 19-June 20	Summer Session I
June 23-July 25	Summer Session II
June 9-July 27	Evening Summer Session

Schedule of class meetings and final exam dates for evening and Saturday courses is available in the semester Continuing Education brochure.

Calendar 1986–87

FALL SEMESTER

August	25–29	Faculty Meetings and Orientation
	30	Freshmen Arrive
September	1	Labor Day—No Classes
	2	Upperclassmen Arrive
		Registration Day
	3	Classes Begin
		Opening Convocation
	27	Parents Day
October	10	Break Day—No Classes
	18	Homecoming
	22	Midterm
November	26	Thanksgiving Recess Begins 2:00 PM
December	1	Classes Resume 8:00 AM
	10	Friday Schedule of Classes
	12	Classes End
	13	Reading Day—No Classes
	15–19	Final Exams

SPRING SEMESTER

January	12–16	Faculty Meetings and In-Service Programs
	19	Registration Day
	20	Classes Begin
February	25	Reading Day—No Classes
March	6	Midterm
		Spring Recess Begins 5:00 PM
	16	Classes Resume 8:00 AM
April	16	Easter Recess Begins 5:00 PM
	20	No Day Classes
	21	Classes Resume 8:00 AM
		Monday Schedule of Classes
May	7	Friday Schedule of Classes
		Classes End
	8	Reading Day—No Classes
	9–13	Final Exams
	16	Commencement

SUMMER SESSIONS

May 18–June 19	Summer Session I
June 22–July 24	Summer Session II
June 8–July 24	Evening Summer Session

Schedule of class meetings and final exam dates for evening and Saturday courses is available in the semester Continuing Education brochure.

Statement of Purpose

The purpose of Elizabethtown College has historically been expressed in the phrase "Educate for service." The College provides an education which should enable the student to develop as an intelligent and moral citizen who can be a productive member of society. The College affirms a relationship between those academic disciplines which primarily prepare students with the mental skills and specialized knowledge to undertake successful personal careers in business, industry, and the professions; and those disciplines which primarily foster the knowledge of cultural heritage, the ability to communicate effectively, the capacity for long-term and continuous self-education for reflective moral and spiritual powers of mind, and for a deep sense of personal integrity. Ideally, Elizabethtown College graduates should be able to serve themselves and others freely and responsibly in an environment characterized by social, cultural, ethical, spiritual, and physical uncertainties. The College seeks to foster that balanced pragmatic mixture of professional and humanistic studies that has historically characterized liberally educated men and women.

The achievement of ideal balance of curricular studies for undergraduate students depends upon diversity of intellectual enquiry and outlook by both teachers and students within the disciplines represented in its curriculum, and upon variety of responsible expression of scholarly opinion. The College welcomes a mixture of students of varied ages, backgrounds, traditions, interests and needs, as these can be accommodated within the existing curriculum. It commits itself to fostering excellence in educational achievement and to strengthening intellectual curiosity.

Overview of Elizabethtown College



A Choice for Quality

We hope that all prospective and current students will review this catalog for important information on Elizabethtown's academic policies and regulations, as well as course descriptions, costs, admissions policies and other significant data.

Elizabethtown, however, is more than a collection of classes. In the true academic tradition, the College is a *community* of scholars where, for more than eighty years, young men and women have gathered to learn and grow together. Like you, these students shared a concern for quality—in their course work, in their social activities, and in the environment where they spent four important years. This interest in quality has, we believe, developed a special atmosphere at Elizabethtown College. This atmosphere stems from the excellence and the human concern of its professors, the quality of the students and of the life they share, the learning which is nourished here, and the lives and careers which that learning in turn inspires.

The "overview" which follows is an attempt to describe to you this atmosphere in which so many students have pursued quality in instruction, and in life.

QUALITY ACADEMIC PROGRAMS

At Elizabethtown, education is not an assembly-line, mass-produced commodity, but a personal journey in which you seek answers to the needs, abilities, and interests that make you who you are. Just as independence in the college community accords both privileges and responsibilities, so this kind of individual education encourages your maturity in the classroom. For if an individual education means that professors must know you well so that they can direct their teaching specifically to you, it also means that you must responsibly participate in your own education—for it is your journey.

Elizabethtown strives to provide an individual education by keeping its classes small and informal. The student faculty ratio is 14:1, and many classes are even smaller, especially in your junior and senior years. The College recognizes that learning comprises two fundamental tasks—the absorption of a given body



of skills and factual information, and the ability of the mind flexibly and subtly to interpret this information, integrating it with the mind's own experience of itself and of the world. Accordingly, lectures and discussion groups encourage you to probe, analyze, speak up, challenge others' opinions, and defend your own. Intelligent disagreement, both with fellow students and with the professor, both in class and afterwards, is always encouraged.

An exceptional faculty

Out-of-class discussions with professors are commonplace at Elizabethtown. The College's instructors have a commitment to helping you on a one-on-one basis, whether challenging you to do incisive independent study, inviting you to help in their own research, or seeing you through a rough spot in a course. Elizabethtown professors' interest in you is personal, and it does not end when the class bell rings—which is one of the reasons they were asked to teach at the College.

Of course, the faculty also possesses the recognized professional qualifications; most of them hold the highest earned degree in their fields, and many are doing research that will lead to the publication of books and scholarly articles. However, the College insists on going beyond formal credentials to find professors who can excite you about their subjects,



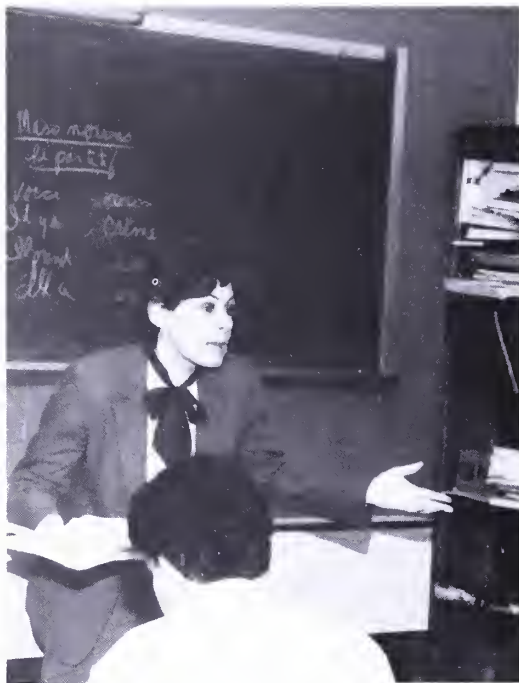
who will value your contributions to the class as greatly as you value theirs, and who can challenge you to develop yourself to your fullest potential.

Modern facilities and equipment

Perhaps the point of greatest interest to a prospective student at Elizabethtown is the library. The library holdings comprise 144,200 bound volumes; over 850 periodicals; 4,600 art slides; 6,700 records, 450 tapes, and 2,800 musical scores; and more than 12,000 microforms. The library features open stacks for research, large reading rooms, small study rooms, and individual study carrels. By virtue of membership in several library networks, the library has access to the resources of other libraries in the state, as well as in the United States.

The science departments have an impressive array of sophisticated equipment, some of which is usually found only at much larger institutions. Their software systems include all the major computer languages. Elizabethtown is one of the few colleges which offers its students additional systems such as a data management system, and simulation, statistical, and interactive graphics packages.

The College has television and radio studios; art studios and photography darkrooms; music practice rooms, practice instruments, and playback equipment facilities for plays and concerts.



Every academic facility on campus has been either renovated or built since 1957. Each department occupies a separate area or building. Classrooms, laboratories, studios, special library collections, faculty offices, and departmental lounges are grouped conveniently together with plenty of space for both faculty and student needs. Consequently, you and your professor can settle a point quickly because the references are close at hand, or you can set up complex laboratory experiments without worrying that other classes will disturb them.

A curriculum that meets your needs

During your first two years at Elizabethtown, you will concentrate on courses that fulfill the General Education Core requirement, a schedule of courses in literature, modern languages, the fine arts, religion and philosophy, history, social science, mathematics, science, and physical education. The resulting broad general knowledge of many fields is good in itself, for certainly no one can claim to be well-educated without it, and it also gives you a chance to sample a full range of academic disciplines before you decide on your major. If, like many freshmen, you are still undecided when you enter college, this aspect of the General Education requirement will be of real benefit to you.

When you are ready to concentrate on a major field of study, Elizabethtown gives you the following choices:

Liberal arts majors:

- Biochemistry
- Biology
- Chemistry
- Communications
- Economics
- English
- History
- Mathematics
- Modern Languages
 - French
 - German
 - Spanish
- Music
- Physics
- Political Science
- Psychology
- Religion and Philosophy
- Sociology

Career-oriented majors:

- Business
 - Accounting
 - Business Administration
 - Chemical Management
- Computer Science
- Education
 - Early Childhood
 - Elementary
 - Secondary
 - Business
 - Music
- Allied Health Professions
 - Medical Technology
 - Music Therapy
 - Occupational Therapy
 - Social Work

Preprofessional programs:

- Prelaw
- Premedicine
- Pre dentistry
- Preosteopathy
- Preveterinary medicine
- Preseminary

To supplement and complement your studies, the College offers a variety of nonmajor courses in:

- Art
- Earth Science
- International Studies
- Physical Education and Health
- Professional Writing

Cooperative programs

In addition, there are cooperative programs with other colleges and universities in:

Engineering (Three years at Elizabethtown and two years at Pennsylvania State University resulting in two degrees);

Forestry (Three years at Elizabethtown and two years at Duke University, resulting in a bachelor's degree from Elizabethtown and a master's degree from Duke);

Prenursing (Two years at Elizabethtown and two years at an affiliated institution.)

Special academic options

Once you have begun intensive study in your major field, you may well find yourself so interested in some aspect of it that you want to explore it more fully than regular coursework allows. Through *independent study*, if your GPA meets the minimum requirement, you can pursue a project of your own for a semester or a year, researching it and writing a professional paper under the guidance of your faculty adviser. Independent study is especially worthwhile if you plan to go on to graduate school because it refines your skills in the research methodology required in graduate studies.



Another academic option, *directed study*, allows you to take a regular course during a semester in which it is not offered to the student body as a whole. Because the professor who teaches the course will instruct you individually, you are in effect a class of one. This option can be helpful if you have a tight schedule and find it difficult to take a course that you need or want when it is normally offered. (Directed study requires an additional fee.)

One popular option is *study abroad*, whereby you may spend a year studying in England, France, Germany, or Spain. You need not be a language major to qualify for foreign study; students have gone abroad to study political science, educational systems, social service organizations, music, and so on.

SOUND PROFESSIONAL GUIDANCE

Elizabethtown's General Education curriculum not only helps you to choose a career, but also seeks to provide you with the breadth and flexibility to change careers as the times change.

A narrow vocational education may qualify you for a specific entry-level position, but it does not provide what you need to move beyond that point. When companies consider you for promotion into positions of responsibility, they do not look for technical skill; instead they look for your ability to reason objectively, solve problems, organize, and com-

municate effectively; which is to say, your ability to think. These are precisely the qualities that a broad intellectual training in the liberal arts will give you.

For careers change. A century ago carriage makers and railroad telegraphers were in great demand; today their skills are almost useless. The acceleration of technology means that the market for specific job skills changes at an ever faster pace, and it certainly makes little sense to spend all your college years preparing for a job that might become obsolete in a decade. It is estimated that today's college freshman will change *careers* (not jobs) five to seven times during his lifetime. Your program of study should anticipate *all* of those careers, not just the first one. A general liberal arts education will enable you to keep pace with change because it trains your mind to be flexible and to grasp new concepts.

People change, too. As you grow older, you may find that your interests take new directions; work which once challenged and fascinated you may come to seem like a straitjacket. Such growth is healthy and desirable, but it may be frustrating if you do not have the intellectual ability to discover and move towards a new and more fulfilling career.

Learning by experience

You should not, of course, neglect to prepare for your first career. Here, one of the finest learning processes is actual experience in your prospective field of work. Although classroom projects in many courses are based





on situations you will meet on the job after graduation, the College can also offer you a more direct experience by placing you in work situations as part of your studies.

Field studies may involve work experience or observation—or a combination of the two. For example, in social work, the Urban Seminar will take you into a major metropolitan area where, for three weeks, you will undertake an on-site study of urban social problems as part of an evaluative comparison between urban and small town social welfare situations. In religion and philosophy, you may visit the major religious centers of the Eastern Seaboard to gain first-hand acquaintance with people who follow Hinduism, Buddhism, Taoism, Shinto, and other religions which are not common in this country. In economics, field trips to major financial centers enable you to see the applications of your studies in the workaday world.

Practicums and internships enable students to gain practical experience through working under the close supervision of a professional in the field. In the past, accounting students have worked with auditing firms; communications majors have taken jobs with radio or TV stations, or on local newspapers; chemistry majors have worked in gas chromatography with an oil company. Internships run from several weeks to a semester or a sum-

mer. When interns return to campus, they write a detailed paper on what they have gained from the experience. Students earn academic credit for a practicum or internship; however, few of these experiences provide a salary.

Learning by experience can help you decide whether you are ready to make a commitment to a specific career. You might find that the job or the field is not for you, after all. However, that discovery is also valuable; because you are still in college, you have time to alter your career direction.

Career counseling and placement

As you begin to consider career options, you will find that the College offers three very useful kinds of resources: your professors, the Center for Counseling and Student Development, and the Career Development Center. As you get to know your professors, you will find that they are knowledgeable about the career and professional opportunities in their academic fields. At any time in your college life, they will be happy to sit down with you to discuss your career possibilities. The Center for Counseling and Student Development can also assist you in aligning your interests and abilities with your educational goals as you go about choosing a major.

To supplement and complement the counsel of professors and the Center for Counseling and Student Development, the College maintains a Career Development Center which offers career planning services which will help you explore career options and settle on the right career for you. A sizable library of career publications provides the latest information about specific careers—everything from the projected number of job openings in a specific field to surveys of salaries at the entry level.

When you begin to think about your first job (probably long before your senior year), that will likely mean you will want to use the placement services of the Career Development Center. The Director, in addition to developing an active on-campus recruitment schedule, maintains a list of current job openings and potential employers, and provides counsel in writing resumes and effective methods to be used in job interviews. The process is successful: 93 percent of each graduating class from 1980–1984 have been either employed or engaged in full-time graduate or professional study within four months of graduation. (Incidentally, the Placement Office also will help you if you are looking for



off-campus, part-time, and summer jobs, and the services of this office are open to alumni long after they have graduated from Elizabethtown.)

A FRIENDLY PLACE TO LIVE

In 1899 students and faculty first joined together to form the academic community that is Elizabethtown College. Since that time they have committed themselves to an educational philosophy which stresses the importance of all aspects of college life. Life outside the classroom—both for students and faculty—should be as challenging and rewarding as the studying that goes on within. For both of these aspects of college life comprise *learning*, that journey of self-discovery and self-realization which leads students to know themselves as completely as they can.

This experience is extremely important if, like most entering freshmen, you look forward to college as your first chance to stand on your own, to look critically about you, and to make informed decisions and individual commitments. In exploring this independence you will want a college that offers you every opportunity to find your own way—and kind—of life. Elizabethtown offers you this opportunity.

A pleasant environment

Most visitors to the College comment upon Elizabethtown's beautiful campus. While there are formal aspects of the college landscape—terraced playing fields, wide lawns, a lovely dell which rises to groves of trees among which sit many of the College's academic buildings, there are also places where you can quietly wander alone—along the small lake where students often read, fish, and doze in the warmer months (and skate in the winter), or out into the countryside which surrounds the town.

For the countryside is beautiful. To the east, Lancaster County is a region of well-kept and remarkably fertile farmland, while nearby to the west of the College rise the Appalachian Mountains, where students often hike in the spring and autumn, and ski in the winter. The Borough of Elizabethtown itself is very small—some 9,500 people—and, naturally, offers many points of contrast, pro and con, to larger cities. Fortunately however, you do not have to choose. On the one hand, you can enjoy the attractive qualities of life in a small town—a fairly relaxed pace of life, a quietly cordial atmosphere, the ready accessibility of all areas of town to the College ("downtown" is an easy walk of several blocks). On the other hand, Hershey, a resort and recrea-

tional center popular with students, is just 15 minutes from campus, and the cities of Lancaster, Harrisburg, and York are all 30 minutes away.

Within this area cultural resources are ample, if naturally less varied and rich than a big city might afford. The College supports a good calendar of cultural events—concerts, recitals, lectures, movie series. Harrisburg and Hershey each support symphony orchestras, and in the summer there is a very fine music and drama festival in Mount Gretna, a few miles to the north. Lancaster is quite properly proud of its Fulton Opera House, a richly restored 19th-century theater which offers a wide array of cultural events in dance, drama, and music. Further afield, Philadelphia and Baltimore are within an hour and a half of the campus, New York and Washington within three. In short, you are by no means isolated at Elizabethtown.

A chance to express yourself

Elizabethtown not only offers you the chance to enjoy cultural offerings both on and off the campus, but it also gives you ample opportunity to discover, explore, and develop your own interests and abilities. You can involve yourself in a wide variety of activities, from acting in plays to directing them, from playing music to playing chess, in scuba diving, spelunking, fencing, and photography, and in many other student organizations in which your interests and talents can have full rein.

Many organizations and groups speak to more serious interests. You can join an organization that reinforces your academic program—like the Accounting Club, the History Club, the local chapter of the American Chemical Society. A number of religious groups offer fellowship and worship in exploring corporate and individual spiritual concerns. In other organizations students give their time and energies in volunteer community service.

Name your interest, and in all probability there is a student organization that reflects it. If not, and if you can find enough like-minded students, the College encourages you to start a new group.

Another very important part of student life at Elizabethtown is the athletic program. The College is well equipped to serve most physical fitness programs. Students and faculty frequently use the gymnasium and the student center—swimming, bowling, jogging, playing tennis or handball or racquetball, working out in the weightroom, and so on.

Whether you want to spend part of an afternoon shooting basketball with a few friends or follow your own schedule of physical conditioning, the College encourages you, firmly believing in the old maxim *mens sana in corpore sano*—a healthy mind in a healthy body.

In addition to individual sports programs, the College fields men's varsity teams in baseball, basketball, soccer, tennis, and wrestling; women's varsity teams in basketball, field hockey, softball, tennis, and volleyball; and coed varsity cross-country and swimming teams. The College's intramural leagues—for men, women, and coed—give you a chance to compete against teams from other residence halls, from other clubs, and from the faculty in flag football, soccer, volleyball, basketball, bowling, softball, racquetball, and tennis.

Helping and being helped

Volunteer work in the community is an important part of college life for many students. They help in a wide range of community services, from working in hospitals to fighting community fires with the volunteer fire company, from tutoring children with reading disabilities to assisting in local churches. This concern is one sure sign that students think of the Borough of Elizabethtown as *their* community, and want to make a personal commitment to it.

In turn, should you need help, the College stands ready to assist you. Your faculty adviser or, indeed, any member of the faculty can offer you academic counseling, from helping you plan your program of study to suggesting tutoring or remedial work, or advanced study. Should you decide to go on to graduate or professional school, members of the faculty will help you in the important process of graduate school selection and admissions.

If you have personal concerns, the Center for Counseling and Student Development is an excellent source of help. Another is the College chaplain, who offers spiritual counsel. If you would feel more at home with a member of your own faith, the chaplain will put you in touch with a local minister, priest, or rabbi.

For routine medical problems, the College maintains the College Health Center with a full-time nursing staff. A modern health center with X-ray and laboratory facilities is five minutes from campus, and in case of emergency or serious illness the Hershey Medical Center (the hospital and medical school of The Pennsylvania State University) is only fifteen minutes away.

Full citizenship in the college community

As a member of the college community, you will enjoy more independence than you have probably ever had before. Not only will you be making important decisions about the direction of your own life, but you will also share responsibility for the well-being of the larger academic community. At Elizabethtown students join the faculty and administration in both the privileges and the duties of citizenship in the College.

Most students live on campus in one of the residence communities. You can become actively involved in the governance of your residence community, planning activities for all residents to share, establishing rules that will protect individual rights and make the community a more pleasant place in which to live, and determining disciplinary measures for violations.

In the larger community, the College as a whole, you can be just as actively involved. Students play a major part in planning all-campus events—from the cultural series to

rock concerts to benefit dance-a-thons. Instead of having “just another student government association,” the College elects students to the Community Congress, the Residence Hall Council, the Campus Life Council, and other college-wide governance and policy-making committees. In short, at Elizabethtown you will have opportunities to test both your leadership skills and your organizational abilities, and to make your voice heard in deciding policies that will set the future course of the College.

Nor is your status as a full member of the academic community merely a matter of governmental organization. It is also reflected in a college social life in which faculty and students meet to enjoy shared interests. Professors join in student activities—not necessarily as leaders, but simply because they enjoy hiking or painting scenery. You in turn will join in faculty activities—not as a student, but as a friend and guest. Thus the old gulf between student and teacher narrows, bridged by a sense of shared commitment to an academic community in which all members join together to live and to learn.



ENTERING ELIZABETHTOWN

If Elizabethtown sounds like your kind of college, your next question is whether you will be accepted for admission. Although that question cannot be answered fully until the Admissions Office sees your application form and high school transcript, you can arrive at a general idea of your chances. The College's admissions policies are both competitive and selective, requiring:

- Completion of a college preparatory program in an accredited high school with standing in the upper half of your class.
- Two letters of recommendation attesting to your academic ability and your character. One letter must be from your high school principal or your guidance counselor. The other letter may be from any one of the following not used previously: high school principal, guidance counselor, or a teacher.
- Scores on the Scholastic Aptitude Test.

No quality college education is inexpensive; in 1985-86 cost for tuition, room, and board is \$4807.50 per semester for resident students; \$3382.50 per semester for commuters. The College does, however, maintain an extensive financial aid program, with over 80 percent of the students receiving some form of assistance, usually in a package that combines grants, scholarships, loans, and on-campus jobs. If you think you will need financial help, the Office of Financial Aid would be happy to talk to you about it.

A catalog can give you some idea of what a college is like, but the best way to make your decision is to visit Elizabethtown. The Admissions Office will arrange a visit that matches your interests: sitting in on particular classes, talking informally with students, getting financial aid information, looking at the special equipment you will be working with in a year or two. The College welcomes the opportunity to become mutually acquainted.

ELIZABETHTOWN COLLEGE AT A GLANCE

The College: Elizabethtown is a four-year, coeducational college associated with the Church of the Brethren, offering a liberal arts education as well as preparation for specific careers. The College is located in Elizabethtown, a residential community in south central Pennsylvania, midway between Harrisburg and Lancaster.

Campus: The campus comprises 110 acres and 16 major buildings, all of which are new or renovated since 1957. Renovations for a major communications and art center to be completed in early 1985.

Students: There are about 1450 students, of which 1200 are resident students representing about 20 states and 8 foreign countries.

Accreditation: Elizabethtown is fully accredited by the Middle States Association of Colleges and Secondary Schools as well as by many professional associations.

Degrees Offered: The College offers the Bachelor of Arts and Bachelor of Science degrees; and through the office of Continuing Education: the Bachelor of Liberal Studies, Bachelor of Professional Studies, Associate of Arts and Associate of Science.

Fields of Study: A complete list of majors is provided on page 35 of this catalog.

Academic Options: Elizabethtown offers such optional academic opportunities as independent study and research, tutorials, directed study, field studies or internships in most departments, study abroad programs.

Faculty: The full-time faculty consists of 104 members, providing a student-faculty ratio of 14 to 1.



Library: The library has 172,985 holdings which include 144,200 bound volumes in open stacks, 850 periodicals, a collection of musical recordings, art slides, and microforms. The library offers a large reading room, small study rooms, and a music listening room.

Residence Halls: Diverse living arrangements are available within the six residence halls, which are equipped with lounges, color TVs, pianos, ping pong tables, vending machines, washers and dryers, kitchen facilities.

Student Clubs and Activities: Elizabethtown offers a wide range of different student activities, covering a range of academic, musical, dramatic, communications, and special interest opportunities. There is a strong, active student government.

Cultural and Recreational Activities: The College maintains a cultural program which brings to campus nationally known speakers, musical and theatrical groups, solo performers. The hub of recreational activities is the Baugher Student Center, which provides a swimming pool and bowling lanes as well as other recreational facilities. The proximity of the College to metropolitan centers of the Eastern Seaboard also makes countless cultural and recreational activities available.



Religious Life: Attendance is not required, but students of various faiths are encouraged to participate in on-campus and off-campus religious services.

Student Counseling Services: As needed, students are urged to take advantage of academic counseling, personal counseling, remedial academic and tutorial assistance, career counseling, job placement, graduate and professional school advisement, medical services.

Athletics: Elizabethtown College, a member of the NCAA, fields teams for men in baseball, basketball, soccer, swimming, tennis, coed cross-country, and wrestling. It fields NCAA women's teams in basketball, field hockey, softball, swimming, tennis, volleyball, and coed cross-country. In addition, throughout the year there is an active intramural program for all students.

Costs: The 1985-86 comprehensive fee (including tuition, room, board) is \$4807.50 per semester for resident students. The fee for commuters (which does not include room and board) is \$3382.50 per semester. Additional costs include books (about \$300 a year), personal expenses, personal transportation.

Financial Aid: The College offers a package of aid consisting of scholarship, grants, loans, and student employment. About 80 percent of all students receive some form of financial aid through the College.

Admission Plans: Elizabethtown offers a rolling admission plan, with each application considered as it is received. For outstanding high school juniors, there is an Early Admissions Plan. Qualified students who have attended a regionally accredited two-year or four-year institution with at least a 2.0 average may apply for transfer to Elizabethtown.

Admissions Fees: There is a nonreturnable \$20 fee which must accompany the application for admission. On acceptance, there is a \$200 acceptance fee, which is applied to the first year's tuition.

Campus Visit: Although not mandatory, a campus visit is strongly recommended.

Admissions



Admissions

ENTERING THE COLLEGE

Elizabethtown College seeks serious students who intend to apply themselves to the educational process. Interested students are urged to look closely at the College's varied academic offerings, its educational philosophy, and its physical facilities.

The College reserves the right to admit students on a selective basis in order to maintain departments and majors of an effective size. Students are admitted without reference to race, color, creed, sex, or national origin. Students may be admitted under four admissions plans: regular, early, transfer, and special.

Regular Admissions Plan

Young men and women who are high school graduates and whose records indicate serious scholarship, good character, and satisfactory health are encouraged to apply for admission to Elizabethtown College. They should communicate with the Director of Admissions to obtain the proper application forms and any detailed information which may be required. The College evaluates applications using the following guidelines:

1. The student must be a graduate of a senior high school accredited by the regional accrediting agency or by the Department of Education of the state in which he lives.
2. The student's high school principal or guidance counselor must recommend admission both in regard to academic ability and to character. (The student must have one additional recommendation from any of the following not used previously: high school principal, guidance counselor, or a teacher.)
3. The student must have completed the College Preparatory curriculum in his high school. However, the College may admit a student who has not completed such a course of study but whom it deems qualified for entrance on the basis of test scores or other means of evaluation.
4. The student must take the Scholastic Aptitude Test administered by the College Entrance Examination Board (Box 592, Princeton, New Jersey 68540).
5. The student should visit the College for an on-campus interview. (While optional, an interview is strongly recommended.)
6. On being admitted to the College, the stu-

dent shall file a physician's statement on a form provided by the College.

Advanced Placement Program (CEEB):

Elizabethtown College participates in the Advanced Placement Program of the College Entrance Examination Board. With the approval of the department concerned, the College may grant advanced placement and credit to students who perform satisfactorily on the Advanced Placement Examination.

Early Admissions Plan

To enable superior high school students to move more quickly into their higher education, Elizabethtown College will allow carefully selected students to begin their college work immediately after completing the junior year in high school. Students enrolled under this program enter the College as regular freshmen; upon successful completion of the freshman year, they are granted a high school diploma in addition to the college credits earned. This program has the full cooperation and support of the Pennsylvania Department of Education.

All degree programs at the College are available to these selected students, who are expected to exhibit the mental and emotional maturity necessary to adjust to the general program of the College. Following enrollment, students receive close academic guidance by selected faculty members.

All applicants for the accelerated admissions program are carefully screened on a highly individualized basis. In addition to the fundamental requirement that students must have completed their eleventh year in an accredited high school program, the College gives acute attention to the following factors: mental ability, scholastic achievement, social and physical maturity, and personal motivation.

1. Students must rank in the upper percentiles of their high school class; furthermore, their performance on the Scholastic Aptitude Test is given weighty consideration.
2. The College accords great importance to the opinions and predictions of the student's high school principal and guidance counselor, and to those of the College's department chair in the student's prospective major.
3. The written approval of the student's parents, high school principal, and guidance counselor is mandatory before the student can be accepted. In addition to the indicated statistical data, the selection process

includes a conference with the student and the Director of Admissions.

Any student interested in applying for this accelerated program should first discuss the matter thoroughly with the high school guidance counselor and then write to the Director of Admissions at Elizabethtown College for an application form.

Transfer Admissions Plan

Elizabethtown College welcomes students who have been enrolled at two-year or four-year colleges. To be fully matriculated, transfer students must provide evidence of good social and academic standing from the previous college.

Students who at the time of matriculation are graduates of a degree-granting two-year college accredited by one of the six regional accrediting agencies will receive advanced standing. A student who transfers from a regionally accredited two-year college may transfer a maximum of 64 hours of credit to Elizabethtown College and will be required to earn a minimum of 64 additional semester hours in order to graduate from the College.

A student who transfers from an accredited two-year college without an associate degree may transfer a maximum of 64 hours of credit to Elizabethtown College. When the total number of transfer credits and credits earned at Elizabethtown College exceeds 59, placing the student in junior status, the student is not permitted to transfer additional credits from a two-year college.

A student who has attended a four-year college or university accredited by one of the six regional accrediting agencies will be permitted to transfer previous academic credit; however, in order to meet graduation requirements, the student must earn a minimum of 30 semester hours credit in classes on the Elizabethtown College campus. These 30 credits must be included within the most recent 60 credits, and a minimum of 15 of the 30 credits must be in the major department. At least 8 of these 15 must be on the upper level (normally 300 or 400 level).

College courses which carry a grade of *C* or *P* or better from other regionally accredited institutions, and which are acceptable toward a degree at Elizabethtown College, may be transferred upon the approval of the Registrar. Credit will be granted for those courses that satisfy the student's major or General Education Core requirements at the College. Other courses will be considered for elective credit. In any doubtful situations, the Registrar will consult the department chair.

Grades are not transferrable; courses and credits, however, may be transferred.

In addition to the six guidelines listed under the Regular Admission Plan, the prospective transfer student will need to present an official transcript indicating work completed at and honorable dismissal from all colleges attended. The College will request recommendations from the dean of the college last attended. Students from nonaccredited institutions should see the special admissions plan.

Special Admissions Plans

The College offers provisional special admissions under the following two programs. In each program, as many as possible of the principles listed under the Regular Admissions Plan will be followed.

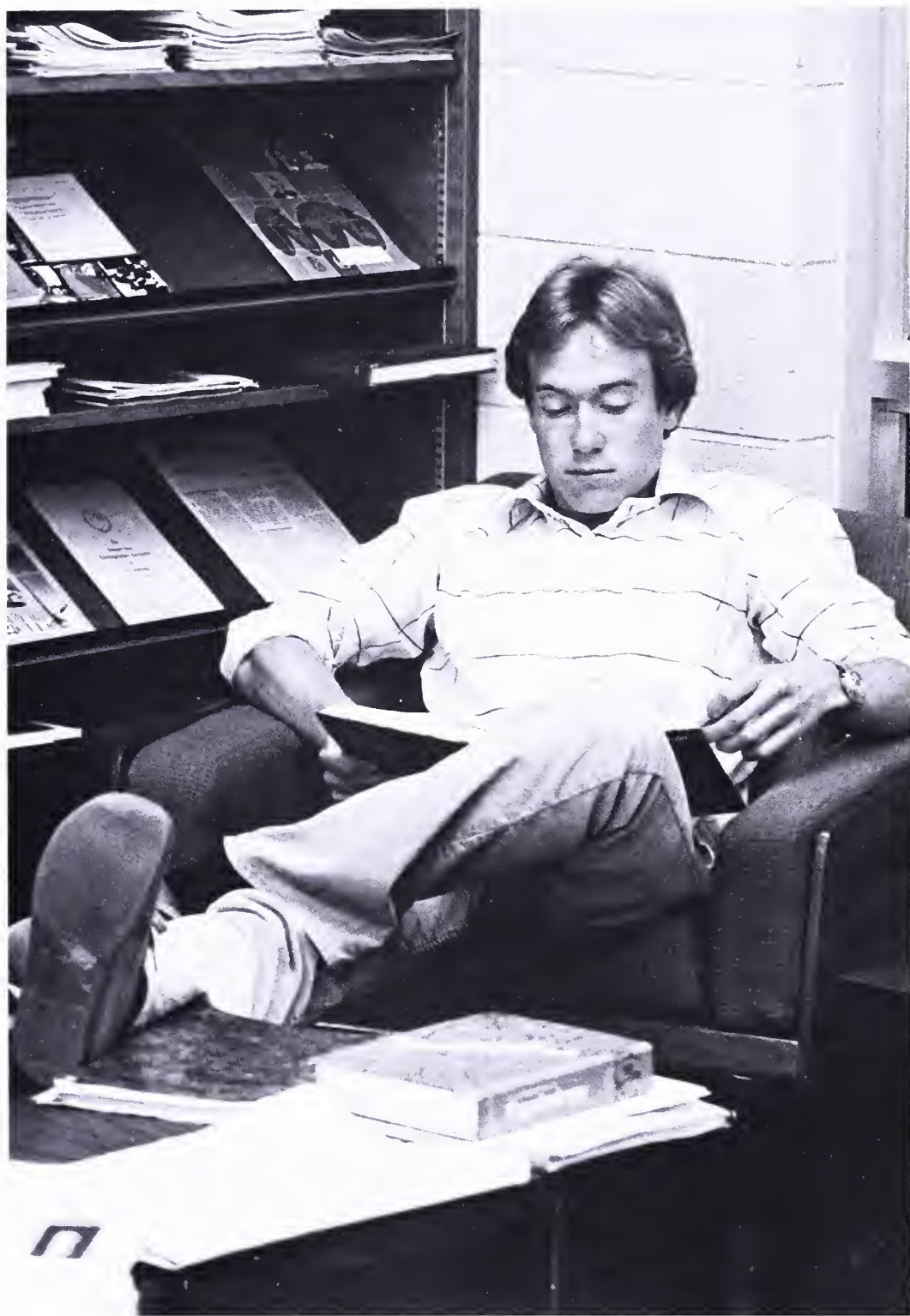
Transfer students from nonaccredited colleges:

Students who have attended a nonaccredited institution may wish to enroll at Elizabethtown. In cases in which the record is above average, the College may allow a student to validate this nonaccredited work by passing more advanced courses at Elizabethtown. In such cases, Elizabethtown reserves the right to revise the evaluation after the equivalent of one semester's work at Elizabethtown College. Full admission may be granted after completion of 15 hours of work with grades of *C* or better. Such students may also validate credit by passing the appropriate College Level Subject Examination or a challenge exam prepared by an Elizabethtown College faculty member. The validation of prior learning through testing is limited to a maximum of 64 semester hours.

Continuing education for older adults:

In some instances adults who may be deficient in some of the college entrance requirements wish to enroll in college study. In those cases in which successful work and other pursuits indicate basic academic aptitudes and achievements, a person may be admitted as a special student on a provisional basis. In such cases full admission may be granted after the completion of 15 hours of college study with grades of *C* or better. The validation of prior learning through testing is limited to a maximum of 64 semester hours. Such credits are considered as transfer credits for purposes of establishing residency. Individuals interested in continuing education will wish to consult the program description on page 40 of this catalog, as well as the Center for Continuing Education in Nicarry Hall.

Cost and Financial Aid



Financial Information

Annual Expenses

The expenses for the year are covered by a comprehensive fee, which for all full-time students includes tuition (12–18 credit hours); class dues; use of the library, the student center, the gymnasium, and the athletic fields; admission to all athletic games and to community cultural programs; subscription to *The Etownian*; and for resident students, limited use of the Health Center, a furnished room, and board. (The cafeteria closes after the noon meal on the day on which the College recesses for vacation, holiday, or semester break, and reopens for the evening meal the day before classes resume.)

Detailed costs for Elizabethtown College may be found in the pamphlet, "Annual Expenses," available from the Business Office. Costs for the 1985–86 academic year follow: resident student, \$9,615; commuter student, \$6,765.

Tuition and Fees for Medical Technology Students

There is an administrative charge of ten percent of the College's tuition fees to the medical technology students entering their clinical year. In addition, these students will pay the hospital any charges directly related to the year of study.

Off-campus Placement

Students may be required to pay any fees charged by agencies or clinical facilities for student placement in programs such as occupational therapy, medical technology, music therapy, education, and so forth, where placement is required by professional accrediting association, the joint program, or other program imperatives.

Tuition Payment Policy

Students will be invoiced in July and December for one-half of the annual comprehensive fee. All institutional financial aid will be included on the invoice. The student should deduct applicable aid from balance due for PELL, SEOG, NDSL, PHEAA, GSL, PLUS, BVR, VA, Social Security, and outside scholarships. Exact amounts can be

found in award letters. Please note that a student must have full-time status to qualify for most types of financial aid.

All charges are payable on or before registration day of each semester. Checks should be made payable to Elizabethtown College.

Withdrawal

Full-time students give their notice of withdrawal in writing to the Center for counseling and Student Development; part-time day students, to the Registrar's office. If withdrawal occurs within the three weeks prior to the date of registration in either semester, a resident student is liable for a \$150.00 room penalty in addition to the preregistration or matriculation deposit. The room penalty when paid will be credited to the student's account should the student return to the College in a later semester as a resident student. If a student withdraws, changes credit hours, and/or room and board status after the beginning of the semester, the student is obligated for a full semester's room charge and actual board used to the date of withdrawal, plus 25 percent of the unused board. Tuition charges will be refunded on the following basis:

First week	75%
Second through Third weeks	50%
Fourth week	25%
Beginning of the Fifth week	00%

The effective date for calculating the above refunds will be the date of receipt of a written notice of voluntary withdrawal in the Center for counseling and Student Development Center. Failure to give notice of withdrawal will result in an unofficial withdrawal. Refunds, transcripts, and recommendations will be withheld by the College until an official withdrawal has been obtained. Refunds for a withdrawal due to medical reasons or when a student is suspended or dismissed from College will be prorated to the date of the withdrawal. All refunds will be paid within thirty days of graduation or withdrawal. Refunds for currently enrolled students must be requested in writing. (Registration day counts as the first day of the semester.)

Absences and Sickness

A student who is absent from the College because of sickness, or for any other reason, and who retains his place in class pays in full during his absence.

Change of Status

The above withdrawal policy is also in force when a student changes credit hours, or room and board status, or both.

General Expenses

An *application fee* of \$20.00 must accompany the application for admission. This fee covers the cost of processing the prospective student's application, is nonrefundable, and cannot be applied toward the payment of other charges.

An applicant should send the Director of Admissions, Elizabethtown College, a *matriculation deposit* of \$200.00 within 30 days after receiving a letter of acceptance. This amount will be applied to the applicant's account as a credit on the first tuition billing. The deposit is not refundable except that \$100.00 will be returned in event of withdrawal prior to February 15. If an applicant intends to postpone the decision until the financial aid package is received, the matriculation deposit will be

due 30 days from the date of the receipt of the aid package.

During the spring semester, a *preregistration deposit* in the amount of \$200.00 is required of all current students who plan to return to college in the fall. This deposit must be paid before a student will be permitted to preregister for the fall semester. The \$200.00 deposit will be applied only as a credit on the fall semester billing and is not refundable.

Cap, gown, and hood rental is paid upon placing an order at the bookstore.

Two transcripts of record will be provided free of charge to students in regular attendance and of freshmen, sophomore, or junior status. Seniors may have a maximum of ten transcripts of record free of charge when applying to graduate/professional schools or for employment. Two copies of the final record are also available free to each student after graduation. A charge of \$2.00 per copy will be made for all other transcripts. No transcripts of record are furnished to anyone whose account is not paid in full.

Financial Aid Policies and Programs

STUDENT AS CONSUMER

The U. S. Office of Education, in section 493A of the Higher Education Act as amended in 1976, requires postsecondary educational institutions to disseminate relevant, candid information on a variety of topics to prospective and enrolled students who request it. As education consumers, students should have available full, up-to-date information in order to make wise decisions about their educational futures.

POLICIES

The Student Financial Aid Program at Elizabethtown College operates in harmony with the principles of student financial aid administration developed by the College Scholarship Service Assembly of the College Entrance Examination Board. The primary goal is to help meet the financial needs of students, to enable them to secure a college education. Consequently, the number of no-need awards (awards based exclusively on factors other than financial need) is controlled in order to permit a majority of college funds to be used to meet financial need.

1. Elizabethtown College is committed to assuring equal opportunity to all persons regardless of race, religion, ancestry, color, national origin, sex, or handicap. This policy extends to employment, admission to the College, and consideration for student financial aids, and is in compliance with all federal laws, including Title IX of the Education Amendments of 1972.
2. Each applicant for financial aid must be accepted by Elizabethtown College and must have submitted an Elizabethtown College Application for Student Financial Aid, as well as a Financial Aid Form available from high school counselors or the Financial Aid Office. The filing deadline at Elizabethtown College is April 1. If a student applies only for no-need grants, a Financial Aid Form in not

necessary; however, the application must be received by the Financial Aid Office by March 1.

3. Late applications will be considered only if necessary funds are available.
4. The amount of financial aid granted to any student is based upon the extent of his financial need (defined as the difference between the total expenses of attending college and the total financial resources available to meet this expense) and the availability of necessary funds. The College considers financial aid to be a partnership shared by the student, parents, and College.
5. The College will determine which programs of available financial aid best satisfy the need of the individual students. An award may be single or a combination of several forms of financial aid. Usually the package is a combination of three elements: grants, loans, and work.

Note: A student has 30 days from the time he receives notice of a financial award either to accept or reject the College's offer.

6. Students may lose financial aid by failing to maintain satisfactory academic progress in accordance with the standards outlined in the college catalog.
7. Students must reapply each year for all financial aid. No aid is automatically renewed.
8. Students' financial aid may change from year to year with changes in their financial status and in the availability of funds.
9. **Refund Policy:** Students who withdraw from the College after the beginning of the semester are obligated to pay the full semester's room charges; the actual board used to the date of withdrawal, plus 25 percent of the unused board. Tuition charges will be refunded on the following basis (Registration day counts as the first day of the semester.):

First week	75%
Second through third week	50%
Fourth week	25%
Beginning of fifth week	00%
10. Parents have a legal and moral responsibility to provide a reasonable amount of financial assistance toward a student's college expenses. The fact that a student desires to be financially independent does not release parents from this responsibility.

11. Financial aid applicants who have previously attended another postsecondary school, college, or university must submit to the Financial Aid Office an official Financial Aid Transcript to document their financial aid record at all previous institutions.
12. The College holds in strictest confidence all financial information which it receives, and considers any award to be a confidential matter between the College and the applicant and his family. The College does not release information about individual awards and considers it inappropriate for aid recipients to do so.
13. All awards will be made for one academic year and will be divided equally between the two semesters.
14. Elizabethtown College reserves the right to make changes in the amount and type of a student's financial aid at any time during a year in which either the student receives additional unanticipated assistance from an outside source, or the College receives information about current family income which varies from the income reported on the Financial Aid Form. Such changes are not only made to protect the equity of financial aid awards, but they are also usually mandated by federal program requirements on aid eligibility.
15. No student may receive more than eight semesters of institutional financial assistance; the College will not award aid to students who already possess a bachelor's degree.
16. A student must be enrolled on a full-time basis to be eligible for most institutional assistance.
17. Withdrawal from Elizabethtown College terminates any aid commitment by the College.
18. Foreign students wishing to study at Elizabethtown College need to show legal documentation that adequate financial resources are available to them before the Financial Aid Director will release the I-20 (student visa) Form.
19. A student receiving employee tuition benefits is ineligible for any other college-administered gift aid unless the student shows financial need or receives an academic scholarship.

Note: Data describing student retention, accrediting agency credentials, and the Col-

lege's accreditation status may be obtained from the offices of the Dean of the Faculty and the Dean of Student Affairs.

STATEMENT ON SATISFACTORY ACADEMIC PROGRESS

All students enrolled at Elizabethtown College are subject to the academic standards of the College which are printed in the Academic Regulations Section of the College Catalog. In addition, students receiving financial aid must also meet additional requirements as described in detail in the following paragraphs.

The Education Amendments of 1976 (Public Law 94-482) mandate institutions of higher education to establish minimum standards of satisfactory academic progress for students receiving financial aid. In order to comply with these Amendments, Elizabethtown College has established the following definition or standard of satisfactory academic progress for its students:

A full-time student (12–18 credits per semester) must have successfully completed 24 semester hours of academic work in the two preceding semesters (summer academic work, where applicable, may be included) in order to be eligible to continue Federal, State, and institutional financial assistance.*

A three-quarter time student (9–11 credits per semester) must have successfully completed 18 semester hours of academic work in the two preceding semesters (summer academic work, where applicable, may be included) in order to be eligible to continue Federal, State, and institutional financial assistance.*

A half-time student (6–8 credits per semester) must have successfully completed 12 semester hours of academic work in the two preceding semesters (summer academic work, where applicable, may be included) in order to be eligible to continue Federal, State, and institutional financial assistance.*

Therefore, it is expected that a full-time student should complete all degree requirements within a maximum of 10 semesters and summer school (5 years) which is considered to be a reasonable length of time.

*Course incompletions, course withdrawals, course repetitions, and noncredit remedial courses will not be counted.

Academic Years Completed

1	2	3	4	5	6	7	8	9	10	SS
Number of Credits Successfully Completed										
Full-Time:										
24	48	72	96	120	—	—	—	—	—	128
Three-Quarter Time:										
18	36	54	72	90	108	126	—	—	—	128
Half-Time:										
12	24	36	48	60	72	84	96	108	120	128

Special Note: A bachelor's degree requires 128 credits. To graduate in four years, a student must enroll for a minimum of 16 credits per semester. Enrolling for 12 credits (minimum for full-time) would extend graduation one full calendar year. There are some financial aid programs with 8 semester limits making financing of the last year possibly quite difficult.

The Financial Aid Office will notify by letter any student receiving financial assistance who does not meet minimum satisfactory progress and is being terminated from aid. The notice will be addressed to the student's most correct address on file. It shall be the responsibility of the student to inform the College of a correct mailing address at all times.

If financial aid is denied based upon the above standards of satisfactory academic progress, the student does have the right to appeal in writing first to the Director of Financial Aid and secondly to the Admissions, Academic Awards, and Financial Aid Committee. If the appeal is accepted, the financial aid in question will be restored to the student. If the appeal is denied, a student can be considered for financial aid only when credits have been completed to make up any credits short of normal satisfactory academic progress for all the semesters a student was on aid.

This evaluation of a student's academic standing and progress to determine Federal, State, and institutional financial aid will be made once a year or after two semesters of academic work. Students failing to progress on schedule at the end of each initial semester will be placed on probation in order to provide them with an early warning.

PROGRAMS**Scholarships****Elizabethtown College Presidential Scholarships**

Four competitive scholarships are awarded annually to academically superior entering freshmen. Each award amounts to \$3000 per academic year; financial need is not a factor considered in the selection process.

Applicants must rank in the top five percent of their secondary school class at the time they apply and must have achieved a combined Scholastic Aptitude Test score of at least 1100 on the College Entrance Examination Board test. In addition, applicants must plan to be enrolled full-time (12 credit hours or more) and display good academic promise, achievement, and citizenship; recipients of the scholarship must maintain these requirements to be eligible for scholarship renewal.

Elizabethtown College Academic Scholarships

These competitive scholarships are based on the academic record of the student, and range from \$200 to \$2,000. Students must rank in the upper ten percent of their high school class and have a minimum combination score of at least 1000 in the College Entrance Examination Board Tests or a composite score of 22 in the ACT test. Transfer students may also apply for this scholarship. They will be evaluated on the basis of their high school records, College Entrance Examination Board or ACT scores, and their records at their previous institution of higher education. Because these scholarships are awarded on a competitive basis, students do not automatically receive a scholarship if they meet the minimum requirements.

Elizabethtown College Dean's Privilege Scholarships

A student who has a cumulative quality point ratio of at least 3.50 at the end of his sophomore year at Elizabethtown College is eligible to apply for this scholarship. Eight \$500 awards are given annually. Students already receiving an academic scholarship of equal or greater value are not eligible.

Other Scholarship Programs

The Ruth Eshelman Althouse Scholarship was established to provide scholarship aid to an outstanding full-time student who has completed two years of study at Elizabethtown College, and who anticipates a career in elementary or secondary education.

The A. Warren Angstadt Tennis Scholarship provides aid to two students in good academic standing who demonstrate financial need, display acceptable campus citizenship, and play well in intercollegiate tennis.

The Flavia Martz Baugher Memorial Teaching Fund was established to provide scholarship aid to two senior students—one in elementary and one in secondary education—who manifest overall promise as outstanding teachers.

The Black Scholarship Fund provides aid for black students who would otherwise not be able to matriculate at Elizabethtown College because of financial need.

The Erna and Dorsey Blecher Scholarship was established to provide scholarship aid to a student enrolled at the College.

The Grace C. Blough Music Scholarship Fund was established to provide scholarship aid to a student who excels in musical aptitude and performance, academic achievement, and good personal character, and who exhibits financial need.

The Brethren Health Education Foundation Scholarship is awarded annually by the Brethren Health Education Foundation and is based upon academic record, college activities, and financial need.

The Bucher Scholarship provides aid to a student enrolled at Elizabethtown who is a member of the congregation at the Gettysburg Church of the Brethren.

The Elizabeth Winterle Collins Scholarship was established to provide scholarship aid for two years to a junior majoring in occupational therapy who has achieved a 3.00 cumulative average or better, demonstrates financial need, participates in extracurricular activities, and resides in Gloucester County, N.J., Camden County, N.J., the State of New Jersey, elsewhere (in that priority).

The Thomas C. Conover Memorial Scholarship was established to provide scholarship aid to a full-time upperclass biology major who exhibits excellence in academic achievement, scientific attitude, and personal character.

The Amos K. Curry Memorial Fund was established to provide scholarship aid to students desiring to enter full-time Christian service.

The Robert S. Doherty Scholarship provides aid to a student who demonstrates scholastic ability, excellent athletic performance, and potential in track or cross-country athletics,

exhibits financial need, and possesses good personal character.

The Mary G. Emenheiser Music Scholarship was established to provide scholarship aid for the development of musically talented students at Elizabethtown College.

The Herman G. Enterline Scholarship is awarded to a student enrolled in the business program (whenever possible a future teacher) who exhibits academic excellence in that field.

The Ernst/Whinney Alumni Endowment Fund was established to provide scholarship aid to an outstanding incoming freshman majoring in accounting.

The Eby C. Espenshade Scholarship was established to provide scholarship aid to any student enrolled at the College who exhibits financial need and who possesses the ability to excel in his college studies.

The Elmer Espenshade Scholarship Fund provides aid to students from Lancaster County who exhibit financial need, academic ability, leadership potential, and who actively participate in campus activities.

The Nevin W. Fisher Music Scholarship was established to provide scholarship aid to outstanding music majors at Elizabethtown College.

The Fund for the Advancement of Ethnic Understanding was established by the Bucher families to foster the cause of underprivileged ethnic minorities in the form of scholarship aid or program aid.

The Future Business Leaders of America Scholarship is awarded by the FBLA to a freshman who demonstrated involvement in FBLA in high school and an above-average academic record.

The Greyhound Corporation Scholarship for Black Students is made available annually from the Greyhound Corporation to an incoming freshman who exhibits financial need.

The Hamilton Bank Work Scholarship Program is presented annually to a freshman student planning to pursue a career in business and residing in the Harrisburg area. The student must be employed by Hamilton Bank during the summers, must demonstrate financial need, and must maintain a minimum 2.0 GPA.

The Howard W. and Margie F. Henry Scholarship Fund was established to provide aid to a student who is (in preferential sequence) a

preministerial student with evangelical orientation; a student preparing for foreign or home mission service; a student majoring in music; or a student majoring in a prenursing program. The recipient should be from Franklin County.

The Huth Engineers Scholarship provides aid to a freshman student from Lancaster County who exhibits need, academic potential, and extracurricular involvement.

The Elizabethtown Kiwanis Golden Anniversary Scholarship, established by Elizabethtown College with the Elizabethtown Kiwanis, provides scholarship aid to a full-time student who has graduated from Elizabethtown Area High School or who is a bona fide resident of the school district. The award is based upon academic ability, citizenship, and financial need.

The Layser Scholarship was established to provide scholarship aid to a deserving student demonstrating academic ability, citizenship, and financial need and planning a career in Christian ministry.

The Edgar Leer Ministerial Scholarship was established to provide scholarship aid for a worthy student preparing for the ministry.

The Emma G. Musselman Foundation Business Scholarship provides aid to a student who has completed four full-time semesters at the College and a minimum of twelve semester hours of business courses and who demonstrates academic excellence and excellent personal character. The scholarship provides the student who continues excellent work with aid in both the junior and senior years.

The Benjamin G. and Vera B. Musser Pre-Medical Scholarship was established to provide scholarship aid to an upperclass student who evidences a sincere desire to pursue a career in the medical profession, and who is chosen on the basis of academic performance, financial need, and faculty letters of recommendation.

The Purchasing Management Association Scholarship is made available by this Association to provide scholarship aid to a senior majoring in either business administration, economics, or accounting, and is based upon his academic achievement.

The R. Kent Replogle Scholarship provides aid to a worthy senior who demonstrates financial need, who has achieved a GPA of 2.75 overall and at least 3.00 in his major field of study, and who has won at least two

varsity letters in inter-collegiate athletic competition for Elizabethtown College.

The Ressler Mill Foundation Scholarship Fund was established to provide scholarship aid to a full-time junior (for the senior year) majoring in occupational therapy, and is based upon academic achievement, scientific aptitude, personal character, and financial need.

The Levi B. Oaks Endowed Scholarship, established in memory of Lucinda M. Mays, provides aid to needy and worthy students attending Elizabethtown College.

The Glenn R. Patterson Scholarship, established by the H. B. Alexander Foundation in memory of a faithful employee, is awarded each year to an incoming student who demonstrates financial need and desires to pursue an education in the field of accounting.

The Charles Troxell Royer Memorial Scholarship is awarded to a student preparing for service in the mission field.

The Mary Sachs Scholarship Fund was established to provide scholarship aid to one or more outstanding students preparing for a career in the field of business and exhibiting financial need.

The Andrew C. Schaedler Foundation Scholarship was established to provide scholarship aid to a worthy and needy student from central Pennsylvania who has graduated from a high school in Dauphin, Lebanon, Cumberland, York, Franklin, Lancaster, Perry, Juniata, Mifflin, Adams, Northumberland, or Huntingdon counties.

The John P. Shepherd, Jr., Athletic Scholarship provides aid to a full-time upperclass student who shows excellence in academic achievement, athletic performance, and personal character.

The Harold E. Smith Company Occupational Therapy Scholarship was established to provide scholarship aid to a full-time sophomore (for the junior year) majoring in occupational therapy, and is based upon academic achievement, scientific aptitude, personal character, and financial need.

The Sperry New Holland Scholarship provides aid annually to three students—a sophomore, a junior and a senior—each majoring in the field of business and showing academic achievement, exceptional individual performance in extracurricular activities, and financial need.

The Student Volunteer Missionary Scholarship provides aid to students preparing for active missionary service.

The Victor F. Weaver, Inc. Scholarship Fund was established to provide scholarship aid to employees or the children of employees of this firm who are enrolled on a full-time basis at Elizabethtown College, and is awarded based upon scholastic achievement.

Grants

Pell (Basic Educational Opportunity) Grants

The Pell Grant is a federally funded gift assistance aid program. This program provides for aid to needy students based upon a formula unique to the program. Students desiring consideration must complete a Pell/Pennsylvania Higher Education Assistance Agency (PHEAA) composite application form and submit it to PHEAA, which will analyze the information submitted and advise the student of his "Student Aid Index." The student must then forward the Aid Report to the College Aid Officer who will determine within guidelines the value of the student's award and notify the students.

Supplemental Educational Opportunity Grants

Under the provisions of the Federal Higher Education Act of 1965 as amended in 1972, the College awards Supplemental Opportunity Grants to needy students. A student must be enrolled or accepted for enrollment on at least a half-time basis, must be capable of maintaining good academic standing, and have exceptional financial need. This grant is awarded on the basis of financial need as determined by the Financial Aid Form.

Pennsylvania Higher Education Assistance Agency (PHEAA) Grants

The PHEAA is responsible for the administration of the State Grant Program in Pennsylvania. Any Pennsylvania high school graduate who took the Scholastic Aptitude Test of the College Entrance Examination Board or the American College Test of the American College Testing Service during the junior year will be sent a State Grant application during October of his senior year. Any student who did not as a junior take either of these two tests is responsible for securing an application from his high school guidance counselor during November of his senior year or from the PHEAA, Grant Division, Towne House, Harrisburg, Pennsylvania 17102. The

deadline for submitting the application to PHEAA is May 1 if the student plans to attend a four-year institution like Elizabethtown College. The maximum annual award is \$1,500.

The guidelines for the program state that an applicant must be (1) a citizen of the United States or taking steps to become a citizen; (2) a resident of Pennsylvania for 12 months immediately prior to the date of application; (3) classified as a full-time student (i.e., taking at least 12 semester hours that will count toward graduation). The awards are based upon financial need rather than scholastic achievement, although a student must maintain progress toward a degree.

Students other than current high school seniors who did not have a State Grant for the prior year may secure an application from the Financial Aid Office at Elizabethtown or from the PHEAA in Harrisburg. The filing deadline for this category of applications will probably be May 1.

Students in other states should contact their high school guidance counselors for information about possible state scholarship programs. Applicants for financial aid from the College are expected to apply for state scholarship or grant aid where available.

Elizabethtown College Trustee Grants

Elizabethtown College Trustee Grants are available to students who demonstrate financial need by filing the Financial Aid Form. Students chosen for these grants must demonstrate positive leadership, special talent, or general service in high school, college, or local community activities. A student must apply annually to be considered for an Elizabethtown College Trustee Grant. A renewal applicant must have at least a 1.80 cumulative average by the end of the freshman year, a 1.90 cumulative average by the end of the sophomore year, and a 2.00 cumulative average by the end of the junior year. In addition, continued significant levels of participation in college or community activities must be evident.

Other Grants

There are several other grant programs for students who meet specific criteria of eligibility. **Parish Grants** of \$400 per year are available to students who are members in good standing of the Church of the Brethren. **Sibling Grants** of \$500 per year are available when two members of the same family enroll as regular full-time students at the College

during the same academic year. The children of full-time ministers in the Church of the Brethren are eligible for the *Minister's Child Grant* of \$200 per year. Information to verify eligibility is secured from the student's institutional financial aid application.

Employment

Work-Study Program

The College sponsors a Work-Study Program developed by the Federal Government under the Federal Economic Opportunity Act of 1964 for students who can demonstrate financial need. The need of each student is determined by the Financial Aid Form. A student employed under the Work-Study Program works in the same areas as a student employed under the Self-Help program. Work-Study students are given job priority over Self-Help students.

Elizabethtown College Self-Help Program

The College provides a large number of part-time employment opportunities for students in the dining hall, library, laboratories, residence halls, academic departments, and other areas. The dollar value of the assignments depends upon the nature of the work and the number of hours that the student can work each week. Students are paid at the rate established by the federal government for full-time students. Students currently enrolled at Elizabethtown College and, among them, students requiring financial aid, are given preference for student employment. The filing of a Financial Aid Form is requested but not required for this program.

Loans

National Direct Student Loan Program

Loans amounting to a maximum of \$1,500 per academic year are available through the College to qualifying students. The cumulative undergraduate borrowing ceiling is \$6,000. To be eligible, a student must be enrolled or accepted for enrollment as at least a half-time student, must demonstrate a definite need for a loan to pursue his course of study, and must be capable of maintaining a satisfactory academic standing. The financial need of the student is determined by the Financial Aid Form. The student borrower is not required to repay any principal or interest while he maintains satisfactory academic standing at the College. Upon graduation or other withdrawal, the borrower is given a repayment schedule and a six-month grace pe-

riod. The interest rate is currently five percent per year on the outstanding balance. This loan program currently has a cancellation benefit for those students who plan to enter certain education fields; deferments are granted for graduate school, Peace Corps, VISTA, and the Armed Services.

Sample NDSL Quarterly Payment Plan

Amount Borrowed	No. of Qtly. Payments	Quarterly Principal Payment	Finance Charge
3% on unpaid principal			
\$1000	12	\$ 90	\$ 45.45
2000	23	90	174.23
3000	34	90	386.33
4000	40	100	615.00
5000	40	125	768.75
6000	40	150	922.50

5% on unpaid principal

\$1000	12	\$ 90	\$ 75.75
2000	23	90	290.38
3000	34	90	643.88
4000	40	100	1025.00
5000	40	125	1281.25
6000	40	150	1537.50

State Guaranteed Student Loan Program

Under the provisions of the Federal Higher Education Act of 1965 as amended in 1976, most states have a Guaranteed Loan Program for college students. Students should consult their guidance counselor or a local banking institution for more information on the program. The programs are comparable in most states.

The maximum loan per academic year is \$2,500 and \$12,500 per undergraduate experience (four years). The federal government will pay the interest on all eligible Guaranteed Loans until six months following the student's separation from the College at which time the student assumes the responsibility of repayment. The loan carries an interest rate of eight per cent. Applications are available only from participating lending institutions, a list of which is available from the student's secondary school counselor. Processing should begin on these loans no later than June 1 of each year in order for students to receive the funds in time for registration. Families with adjusted gross incomes exceeding \$30,000 may be eligible for a GSL but must submit to a Needs Test.

Sample Guaranteed Loan Monthly Repayment Schedule

Annual Percentage Rate 7%

Amount Borrowed	No. of Mnthly. Payments	Monthly Principal & Interest Payment	Finance Charge
\$ 1000	36	\$ 30.88	\$ 111.68
2000	84	30.19	535.96
3000	120	34.84	1180.80
4000	120	46.45	1574.00
5000	120	58.06	1967.20
6000	120	69.67	2360.40
7000	120	81.28	2753.60
8000	120	92.89	3146.80
9000	120	104.50	3540.00
10000	120	116.11	3933.20

Sample Guaranteed Loan Monthly Repayment Schedule

Annual Percentage Rate 8%

\$ 1000	36	\$ 31.34	\$ 128.09
2000	84	31.17	618.55
3000	120	36.40	1367.69
4000	120	48.53	1823.79
5000	120	60.66	2279.89
6000	120	72.80	2735.37
7000	120	84.93	3191.47
8000	120	97.06	3647.58
9000	120	109.20	4103.06
10000	120	121.33	4559.16

PHEAA Family Partnership Loan Program

The PHEAA Loan Program requires the applicant to have applied for a Guaranteed Student Loan and been completely rejected or had the dollar request reduced by at least \$1000. When this occurs, PHEAA will then mail the applicant a Partnership Loan Application. Under the Partnership Loan Program a family may borrow a minimum of \$2000 or a maximum of \$5500 per year. The Loan is equally divided between an 8% nonsubsidized Guaranteed Student Loan and a 12% PLUS Loan creating a blended interest rate of 10%.

PHEAA Supplemental Loan

This PHEAA Loan Program is for creditworthy parents. A parent may borrow up to \$10,000 per year or \$50,000 aggregate. The regulations require parents to begin repayment 60 days after issuance of the promissory note and the repayment can be extended for 15 years. The interest rate is 12%.

Parent Loan Program

This program allows parents to borrow up to \$3,000 a year for each child in college, up to a total of \$15,000. The regulations require parents to begin repayment within 60 days after they receive a loan. Interest on loans will be 12 percent.

Tuition Budget Plan

Academic Management Services, Inc., offers a low-cost, flexible system for paying educational expenses out of current income through regularly scheduled payments over a period of 10 months. Instead of the usual large payments due at the beginning of each semester, an applicant can budget educational expenses in convenient monthly payments for just \$40.00 per school year. Subsequent years may be spread over 12 months upon reapplication. There are no interest or finance charges. Further, Life Benefit Coverage is provided at no additional charge. Old Stone Bank of Rhode Island serves as Trustee for AMS tuition fund.

External Financing Plans

The Girard Edu-Check Plan, available through Girard Trust Bank, enables the family to pay for college expenses on a monthly basis from current income. An important feature of the plan is the insurance coverage: if the parents' earning power is destroyed by disability or death, funds are provided each year to enable the student to complete his education.

Richard C. Knight Insurance Agency, Inc., offers a similar plan, the New Insured Tuition Payment Plan. Information about the plan is available by writing Richard C. Knight Insurance Agency, Inc., New Insured Tuition Payment Plan, 53 Beacon Street, Boston, MA 02108.

The Tuition Plan offers two separate programs: The Educational Financing Program and the Monthly Budget Program. Information about these plans is available by writing The Tuition Plan, Concord, New Hampshire 03301.

The Collegeaire Program stretches the smaller amount of money parents have in savings to provide the larger amounts needed to pay college bills. In fact, Citizens Bank will make every dollar of savings worth up to \$2.50 to pay for college. Information about this plan is available by writing Collegeaire, P.O. Box 723355, Atlanta, Georgia 30339.

STEPS IN APPLYING FOR FINANCIAL AID

Each applicant must file all required financial aid forms with the Financial Aid Office no later than *April 1* to be considered for financial assistance for the following academic year. Elizabethtown College will not accept estimated data.

Entering Students

1. Submit an Elizabethtown College Application for Admission and become accepted into Elizabethtown College.
2. Submit an Elizabethtown College Financial Aid Application as soon as possible. Students applying for Academic Scholarships must file by *March 1*. Transfers must also submit a Financial Aid Transcript.
3. File a Financial Aid Form (FAF). Secure Form from high school counselor in December and file in February or March. (*File must be based upon completed tax return.*)
4. Apply for PELL and State Grants. Secure applications from high school counselor. PHEAA deadline: *May 1st*.
5. Send exact *signed* copy of Parents' base tax year 1040/1040A/1040EZ Income Tax Form (1st two pages only) as submitted to IRS plus a *signed* copy of student's base tax year 1040/1040A/1040EZ and student's base tax year W2 Forms to the Elizabethtown College Financial Aid Office.
6. Apply for other aid:
 - a. Guaranteed Student Loans, Parent Loans—Prior to *June 1st*.
 - b. Secondary School Scholarships.
 - c. Civic Scholarships

At this point the Financial Aid Officer awards a Financial Aid Package to those approved.

Returning Students

1. Submit an Elizabethtown College Upper-class Financial Aid Application as soon as possible.
2. File a Financial Aid Form (FAF). Secure from Financial Aid Office in December and file in February or March if possible. (*File only based upon completed tax return.*) Out-of-state students file appropriate home state FAF.

3. Apply for PELL and State Grants. Secure applications from Financial Aid Office. PHEAA deadline: *May 1st*.
4. Send exact *signed* copy of Parents' base tax year 1040/1040A/1040EZ Income Tax Form (1st two pages only) as submitted to IRS plus a *signed* copy of student's base tax year 1040/1040A/1040EZ and student's base tax year W2 Forms to the Elizabethtown College Financial Aid Office.
5. Apply for other aid:
 - a. Guaranteed Student Loans, Parent Loans—Prior to *June 1st*.
 - b. Secondary School Scholarships
 - c. Civic Scholarships

At this point the Financial Aid Officer awards a Financial Aid Package to those approved.

GENERAL INFORMATION REGARDING FINANCIAL AID

Elizabethtown College will begin making financial aid awards for the 1985–86 and 1986–87 academic year in October 1984, and October 1985, respectively. The Financial Aid Office hopes to notify all applicants before the end of June 1985, and June 1986. Those who require an earlier decision of their financial aid application due to special circumstances should write directly to the Financial Aid Office indicating the reason why early consideration is required. The Financial Aid Office will try to inform them of the College's action. Those who have not received any reply from the College regarding financial aid by the end of June 1985, or June 1986, should contact the Financial Aid Office immediately. The Financial Aid Officer will be happy to schedule a personal interview with students and parents regarding their financial situation and the possibilities of financial aid at Elizabethtown College. An appointment may be obtained by writing to the Financial Aid Office at the College.

Since the sources of financial aid which are administered by the College are limited, the College is not able to award financial assistance to every qualified applicant. Students are encouraged to contact their high school counselors regarding other scholarships awarded by local organizations such as the Lions Club, Kiwanis Club, and the PTA. Students should check with their parents'

employers regarding scholarship programs and should investigate other external sources of financial aid such as the State Scholarship and Loan Programs.

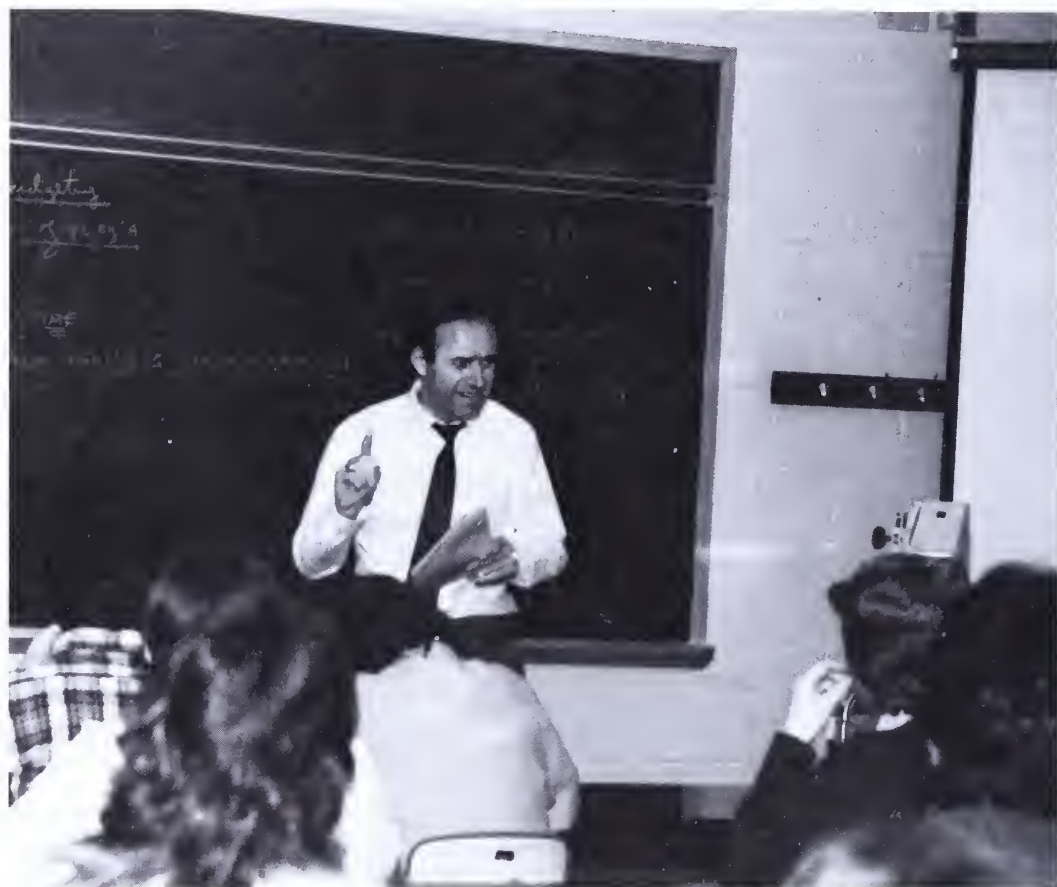
All requests for applications and other information regarding financial aid should be directed to the Financial Aid Office, Baugher Student Center, Elizabethtown College, Elizabethtown, Pennsylvania 17022.

The complete counseling services of the Financial Aid Office are available to both en-

rolled and prospective students; services include information dissemination, budgeting assistance, and general assistance in planning the financing of a college education.

Appointments are scheduled between the hours of 8:30 a.m. and 5:00 p.m., Monday through Friday. The above financial aid policies and program descriptions are subject to change at any time as the result of new or amended state or federal legislation and changes in Elizabethtown College policies.

The Academic Program



The Academic Program

DEGREES OFFERED

Elizabethtown College grants two residence degrees: the Bachelor of Arts and the Bachelor of Science.

Both bachelor degrees require the completion of at least 128 semester hours of credit, an average of at least 2.00 in the major, an average of at least 2.00 overall, and the completion of all requirements of the major and the General Education Core. The College does not guarantee graduation to any student unable to complete requirements of a specific program or academic major.

The College offers four additional degrees through the Center for Continuing Education: the Bachelor of Liberal Studies, the Bachelor of Professional Studies; the Associate of Arts, and the Associate of Science.

THE ACADEMIC MAJOR

The College offers degrees in the following academic majors within which a number of options are available. For details of courses, minors, and major requirements, students should consult the departmental listings in this catalog.

Accounting (Business), B.S.
 Biochemistry, B.S.
 Biology, B.S.
 Business Administration, B.S.
 Business Education (Business), B.S.
 Chemistry, B.S.
 Communications, B.A.
 Computer Science, B.S.
 Early Childhood Education, B.S.
 Economics (Business), B.A., B.S.
 Elementary Education, B.S.
 Engineering, B.A.
 English, B.A.
 Forestry and Environmental Management (Interdisciplinary), B.S.
 General Science (Interdisciplinary), B.S.
 History, B.A.
 Mathematics, B.S.
 Medical Technology (Chemistry), B.S.
 Modern Languages, B.A.
 Music, B.A.
 Music Education, B.S.

Music Therapy, B.S.
 Occupational Therapy, B.S.
 Physics, B.S.
 Political Science, B.A.
 Psychology, B.A., B.S.
 Religion and Philosophy, B.A.
 Social Studies (Interdisciplinary), B.S.
 Social Work (Sociology), B.A., B.S.
 Sociology, B.A., B.S.
 Sociology/Anthropology, B.A., B.S.

THE COLLEGE WRITING COMPETENCY REQUIREMENT

Those incoming freshmen whose record fails to demonstrate basic language skills and writing ability are required to take either (1) English 101 (Basic English) followed by English 102 (Expository Writing) or (2) English 102. Those students who demonstrate a high level of proficiency in language and writing skills will be permitted to proceed to English 105 (Introduction to Literature).

Note: No credit will be granted for English 101 if it is taken after successful completion of English 102.

THE GENERAL EDUCATION CORE

Through the General Education Core curriculum the College affords each student a broad exposure to the liberal arts and the sciences, and thus ensures a general comprehensive education which complements both the more intensive studies in the academic major and minor and the less structured framework of elective courses. Core courses (identified below and in the course listings) are of two kinds: prescribed individual course requirements and area distribution requirements in which students may choose from among a list of approved courses within the general prescribed academic area.

Alternatives to the Core curriculum, or deviations from it, must be approved by the Academic Standing Committee.

A detailed list of Core requirements and courses follows.

College Requirement

<i>Area</i>	<i>B.A. Hours</i>	<i>B.S. Hours</i>
International Education	6	6

All students shall take a minimum of six semester hours of courses above the 100 level in foreign cultures or international affairs, contemporary or historical. This requirement can be met with courses taken in the Core, major, minor, or elective areas.

Core Area Requirements

<i>Area</i>	<i>B.A. Hours</i>	<i>B.S. Hours</i>
Literature	6	6

Complete English 105 and one other course from among the English, French, Spanish, or German literature courses listed below. Note: courses in composition, literary criticism, history of the language, professional writing, or the teaching of English do not fulfill the literature Core requirement.

Modern Language	5	5*
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Complete Modern Language 112 or demonstrate competence at that level by taking a placement test. All students with more than one year of high school language must take the placement test. Depending on language background and test results, students may merit exemption from Modern Language 112 and enroll in upper-level language courses, or take Modern Language 112 for credit and fulfill language requirement, or take Modern Language 111 and 112 for credit and fulfill requirement.

*Some majors do require a language for a bachelor of science degree; students should check the program description in this catalog.

Fine Arts	3	3
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Complete three hours in any of the art, communications, and music courses listed below.

Religion and Philosophy	6	6
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Complete the required hours in any of the philosophy and religion courses listed below.

History	6	6
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Complete History 105 and one other history course from among the history courses listed below.

Social Science	9	9
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Complete the required hours in any of the economics, political science, psychology, anthropology, and sociology courses listed below.

<i>Area</i>	<i>B.A. Hours</i>	<i>B.S. Hours</i>
Mathematics	3	6

Complete the required credit hours from among the mathematics courses listed below. Note: many mathematics courses require prerequisite lower-level mathematics courses; Mathematics 011 does not fulfill the mathematics Core requirement or count toward credit for graduation.

Science	8	8	Complete the required credit hours from among the biology, chemistry, physics, and earth science courses listed below, taking two courses in one science, or one course in physics and one in earth science. Students must take the associated laboratory if the course is to count for Core. Note: many science courses require prerequisite lower-level science courses.
Physical Education	4	4	Complete four activity courses, including at least one but not more than two aquatics activities, from among the courses listed below. Physical Education 270 counts as three hours towards graduation, but fulfills only one credit towards Core. Physical Education 150, 160, 260 will count for Core credit only once each. No more than six physical education credits may be counted toward the 128 for graduation. Course titles may not be repeated; no student who passes a swimming course may take the swimming proficiency test for credit. A swimming proficiency test, given at the beginning of each semester, must be taken no later than the fall of the sophomore year. This test may be taken only once. A transfer student who desires to take the test must do so at the beginning of his first semester.

Courses which fulfill the area requirements noted above follow.

International Education Requirement

Anthropology 202, 211, 307, 308. Art 355. Business Administration 317. Economics 307, 308. English 320, 322, 323, 327, 328, 329. History 205, 211, 212, 213, 214, 215, 216, 313, 314, 317, 318, 323, 324, 327, 328. Modern Foreign Languages (French, German, Spanish) 211, 212, 311, 312; Music 441. Political Science 205, 301, 342. Religion 221, 222.

Core Courses

Literature

English 312, 313, 314, 317, 318, 320, 322, 323, 327, 328, 329, 331, 332, 333, 337, 338, 340, 341, 342, 343, 351, 352, 357.

Modern Foreign Language 323.

Fine Arts

Art 105, 211, 251, 324, 355, 371–380. Communications 255 and 265. Music 101, 102, 105, 111, 120, 235, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 360, 361, 362, 365, 368, 369, 415, 417.

Religion and Philosophy

Religion 105, 115, 125, 201, 202, 213, 221, 222, 230, 231, 310, 320, 330, 340, 370–379. Philosophy 105, 115, 201, 212, 255, 310, 320, 340, 370–379.

History

History 201, 202, 205, 215, 216, 306, 313, 314, 315, 316, 317, 318, 323, 324, 327, 328, 330–339, 340–349, 370–379, 390, 403, 406, 411, 412, 480–489, 498–499.

Social Science

Anthropology 201, 202, 211, 307, 308, 360, 371–380, 481. Economics 101, 102, 301, 302, 303, 304, 306, 307, 308, 309, 370–379, 480–489. Political Science 105, 117, 118, 202, 205, 301, 305, 308, 323, 329, 333–339, 342, 370–379, 382, 401, 413. Psychology 105, 106, 213, 215, 221, 225, 235, 317, 322, 333, 334, 370–379, 401, 402, 413, 414, 425, 435, 471–472, 480–489, 491–492. Sociology 101, 105, 201, 212, 215, 220, 222, 233, 237, 305, 317, 330, 331, 332, 342, 344, 350, 360, 371–380, 481–491.

Mathematics

Mathematics 101, 117, 121, 122, 151, 172, 201, 211, 212, 222, 252, 301, 302, 321, 324, 341, 351, 352, 361, 362, 370–379, 421, 422, 441, 480–489.

Science

Biology 105–105L, 106–106L, 108–108L, 111, 112, 201, 202–202L, 212, 215–215L, 222, 235, 313–313L, 321, 324–324L, 331, 332, 341, 342, 343, 347, 352, 370, 379, 380–389, 412, 480–489.

Chemistry 101, 104, 113, 114, 213, 214, 242, 323, 323L, 324, 324L, 343, 344, 351, 352, 370–379, 402, 421, 490–495.

Earth Science 105, 107, 108, 111, 112, 301, 370–379, 481–489.

Physics 111, 203, 204, 132, 231, 232, 305, 306, 343, 344, 345, 370–379, 403, 404, 407, 408, 481–489, 490.

Physical Education

Physical Education 105, 115, 125, 135, 145, 150, 155, 160, 165, 185, 195, 205, 210, 217, 218, 225, 235, 240, 245, 250, 255, 260, 265, 290, 295, 370–380, 481–490.

PROGRAM VARIATIONS AND OPTIONS

In addition to the majors indicated above, Elizabethtown College offers a number of alternative learning opportunities both on and off campus. On-campus study includes special programs which emphasize individual study and close work with a member of the faculty. Off-campus opportunities include joint programs with academic institutions or clinical facilities, or study abroad.

On-Campus Study**Honors Courses**

Each year outstanding freshmen are invited into several honors courses of the General Education Program. These courses are taught by outstanding instructors and are limited to fifteen students each, thus allowing much greater opportunity for student participation in class discussion. Honors courses are designated *Honors* on the student's transcript.

Special Studies

Elizabethtown College recognizes the advantages and the need of education and study outside the traditional classroom, and offers the following opportunities:

Independent Study shall be undertaken for the special investigation of a topic or for the benefit of the advanced student whose special academic requirements cannot be met by regular catalog offerings. It should not be used simply to assemble credits for graduation. To apply for an Independent Study, one must make a preliminary definition of the topic or issue to be pursued, securing the permission of the faculty sponsor and the chair of the department in which the Independent Study is undertaken. The faculty member or members sponsoring the Independent Study will be involved in planning and evaluating the project, but the student should be capable of independent work. Independent Study is not tied to the academic calendar, and a project may be begun or ended at any point. It is to be registered with the Registrar at the beginning of the semester during which it will be completed. Application forms for Independent Study are available at the Registrar's Office.

Directed Study is a second type of study available to matriculated students at Elizabethtown College. In contrast to independent study of a special topic, Directed Study will be undertaken for a regular catalog course which is not a part of the course offerings for the given semester. This method of study should be used by the student who needs rather frequent conferences with the professor.

An additional tuition charge, which may change from year to year, is also the responsibility of the full-time student who registers for Directed Study. Part-time students who are granted permission to register for a Directed Study course pay the same surcharge. Full-time students whose load exceeds 18 hours as a result of the Directed Study registration shall be charged the current part-time rate for tuition for those hours in excess of 18, plus the same surcharge for all Directed Study credits.

Tutorials are available where remedial work is necessary for the student to profit from a classroom course. A tutorial involves more frequent meetings between professor and student than either Independent Study or Directed Study. It is the responsibility of the student to locate a professor who is willing to enter into the tutorial agreement. Generally a faculty member will not teach more than one tutorial per semester.

Any student who enters into a tutorial agreement will be responsible not only for the reg-

ular tuition, but also for a surcharge which varies from year to year.

Note: For all special studies, the student shall register in the Registrar's Office.

Off-Campus Study

Joint Institution Programs

In these programs students study at the College and at affiliated academic institutions or clinical facilities. There are three major programs with other academic institutions: preforestry with Duke University, preengineering with Pennsylvania State University, and prenursing with Georgetown University. Programs with other institutions are under consideration.

In the *preforestry* major the student spends three years at the College and an additional year in professional studies at Duke, after which the College grants the bachelor of science degree; an additional year at Duke leads to a master's degree in forestry or environmental management. For further details see the interdisciplinary section of this catalog.

Preengineering is a 3-2 program with Penn State University. After completing three years at Elizabethtown College, the student transfers to University Park, completes two years of work in an engineering field, and receives a bachelor of arts degree from Elizabethtown College and a bachelor of science degree from Penn State University. For further details see the description in the Physics Department listing of the catalog.

In the *prenursing* major the student spends two years at the College and an additional two years at an affiliated institution. For further information consult the description in the Biology Department listing of the catalog.

The College also offers a number of majors in which work at affiliated clinical facilities constitutes an important part of the student's education. In music therapy, occupational therapy, social work, and medical technology, students combine work at the College with first-hand experience in hospitals, clinics, professional offices, and social work and therapy programs. For detailed descriptions see the listings under the Departments of Music, Occupational Therapy, Sociology/Anthropology/Social Work, Chemistry, and Business.

Study Abroad

The College participates in programs offering study abroad in Germany, France, Spain, and England.

The six colleges associated with the Church of the Brethren cooperate in the *Brethren Colleges Abroad* (BCA) program, offering a junior year of study in Germany, France, or Spain. Students may study at Phillips-Universität, Marburg/Lahn, West Germany; at the University of Strasbourg, France; or at the University of Barcelona, Spain. A wide selection of courses is offered in the social sciences and the humanities. Students are given intensive language instruction prior to the opening of the university semesters.

To qualify for the BCA program, the student should have a 3.0 average. Students bound for Germany must have completed the equivalent of the second year of German in college and have approximately a *B* average. Although most students bound for France or Spain must also have completed the equivalent of two college years of French or Spanish, outstanding students who have completed the first year will be accepted. Other qualifications include seriousness of purpose, good character, demonstrated potential for social adjustment, and a basic understanding of the United States and the host country. The credits earned abroad are transferred toward the degree at Elizabethtown. A faculty adviser is in residence in Europe during the year.

The program accommodates about 25 students at each university; Elizabethtown College has a quota of three or four for each. Interested students should confer with Dr. J. Kenneth Kreider, BCA Program Coordinator, and their major adviser.

As part of the BCA program the College offers a semester in England. Students attend full-time at St. Mary's College, Cheltenham, England, where they enroll in a Seminar in British Culture and Education, and select an additional three or four courses. Credit for these courses is applied toward the degree at Elizabethtown College. Fall semester students depart in early September and return before Christmas; spring semester students depart in late January and return in late May. For information contact Dr. Kreider.

DEVELOPMENTAL STUDIES

As part of Elizabethtown College's increasing efforts to make a college education available to a variety of students, the Developmental Studies Program is designed for the motivated student with academic potential, but with less-than-adequate education credentials (SAT scores, high school grades, and/or rank).

The Developmental Studies Program has several thrusts. First, it offers academic courses in the fall semester geared to introducing the student to the rigors of college-level study. Second, the Program provides strong support services (academic advising, peer and professional tutoring, and group and peer counseling) to its students. Third, the Program offers instruction to aid in achieving basic competency in mathematics and writing skills necessary for competing successfully in college-level courses. Opportunities for improvement are also available for the student desiring instruction in reading and study skills. To complete the student's first semester schedule of twelve to fourteen semester hours, courses from areas such as physical education, history, sociology, religion, and psychology are available for the student. Each entering freshman's academic course load is individually scheduled to provide the greatest opportunities for the student who waits to declare a major area of study until his exit from the Program at the conclusion of his freshman year.

The following courses comprise the Program's offerings:

MA 011 Intermediate Algebra

2 credits. The course is a study of the fundamental algebraic and computational skills used in certain science courses and prerequisite to Mathematics 101 and 117. These credits will not count toward the 128 credits required for graduation. Letter graded.

EN 101 Basic English

3 credits. This course introduces students to various forms of academic prose, with an emphasis on developing students' fluency and voice in writing. Letter graded.

DS 170 Introduction to Liberal Learning

3 credits. This course introduces the student to the framework of a liberal arts education. De-

signed to encourage critical and reflective habits of mind, the course also focuses upon reading and writing skills. Topics cover the common body of liberal education, embracing the arts and sciences and dealing with their impact on the historical development and current status of ideas. The structure of the course consists of hour-long lectures by faculty representing the various disciplines, followed by discussions in small seminar settings. Letter graded.

CONTINUING EDUCATION

Elizabethtown College regards the training and education of adults as integral to its academic program. To reflect that commitment, the College offers study options that allow students to complete bachelor of arts and bachelor of science degree requirements through evening and Saturday study. Additionally, certificate programs for persons who are beginning college work, and diploma programs for college graduates are available both on and off campus at times convenient to working adults.

Individuals may also earn Elizabethtown College degrees through study at the University Center in Harrisburg, a consortium comprising Elizabethtown College, Lebanon Valley College, the University of Pennsylvania, Temple University, and The Pennsylvania State University.

In addition to these traditional learning options, the College offers an external degree program in which adults work with faculty advisers to develop individualized plans of study leading to associate, bachelor of professional studies, or bachelor of liberal studies degrees. Credit earned through traditional classroom education, special studies, and testing is combined with learning achieved through life and work experience to meet external degree requirements. As a service to adults working in business, industry, and health care, the College also sponsors a number of noncredit seminars and workshops.

For detailed information on continuing education programs at Elizabethtown College contact the Center for Continuing Education, Nicarry Hall, Elizabethtown College.

Course Descriptions



Course Descriptions

Following, arranged alphabetically by departments or programs, are the courses offered by the College. For each department, there is first a section treating the programs offered. This is followed by a second section which discusses the required courses in each program or concentration.

Some departments offer majors or concentrations in more than one academic discipline. For convenience, these academic disciplines are listed alphabetically in the text, and the reader is there referred to the appropriate department.

ACCOUNTING

See Department of Business, page 47.

ANTHROPOLOGY

See Department of Sociology/Anthropology/Social Work, page 97.

DEPARTMENT OF ART

Professor Henry M. Libhart (*Chair*)

The academic and the practical courses in the art program aim to help students refine their creative potential and expand their judgment of the visual arts. Studio courses in two-dimensional media are offered, but physical limitations necessitate permission of the Registrar for any student to enroll in a studio course. There are no prerequisites for any of the art courses at the College.

105 Drawing

3 credits. (Core) Studio practice in basic drawing media for sketching and rendering both live and inanimate subjects.

211 Oil Painting

3 credits. (Core) Studio easel painting in opaque media with stress on pictorial organization and application of color theories.

251 Printmaking

3 credits. (Core) Experience in silk-screen operations and the several methods of relief and intaglio plates, and instruction in the use of the printer's machinery.

324 American Arts and Crafts

3 credits. (Core) Comprehensive scan of U.S. arts, observing their derivation from social, ethnic, and aesthetic influences.

355 Introduction to Art

3 credits. (Core) Experience with selected works by major and minor artists of the modern epoch, as a means of recognizing and evaluating artistic style.

371-380 Seminars in Fine Arts

Variable credit. (Core) Offered as occasion justifies.

DEPARTMENT OF BIOLOGY

Professors Dively (*Chair*), Heckman,
Hoffman, Pepper
Associate Professors Laughlin, Polanowski

Bachelor of Science

The courses of the Department of Biology have been designed to provide a foundation in basic concepts and principles involving the structural, functional, and environmental aspects of the living world. The Department seeks to provide the liberal arts student with a choice of courses emphasizing biological theories which provide a broad and unifying understanding of nature's life forms.

The curriculum, leading to a Bachelor of Science in Biology, is designed to meet the individualized needs of students, preparing them for the rigors of graduate school and professional schools of medicine, as well as for biologically oriented employment opportunities.

The Department makes a special effort to involve students in research studies with professors through senior seminar and independent study projects.

The Department of Biology offers a choice of four majors leading to a bachelor of science from Elizabethtown College. In addition, the Department offers a biology minor and two programs leading to receipt of a degree from cooperating institutions.

The Bachelor of Science: Biology Major prepares the student for a biologically related profession or for graduate school. The specific requirements are Biology 111, 112, 212, 215, 215L, 311, 313, 313L, 324, 324L, 412, and 12 additional hours in biology, including one course selected from 235 or 347, one course selected from 342 or 343, and one course selected from 321, 331, or 332. Other course requirements are Chemistry 113, 114, 213, 214; Physics 203, 204; Mathematics 101, 121 or 117, 172 or 151; and a foreign language through the 112 level or Computer Science 121 and 122.

The Bachelor of Science: Biology Major/Medical Concentration prepares the student for entry into professional schools of medicine or related fields. The specific requirements are the same as those for the biology major except that students should select Biology 341 instead of 321, 331, or 332.

The Bachelor of Science: Biology Secondary Education Major prepares the student for the receipt of Pennsylvania Secondary Education Certification within the framework of the *biology major* (see above). This major is designed to provide a

strong background in the sciences while simultaneously fulfilling the requirements for secondary teaching certification. The specific requirements are Biology 111, 112, 215, 215L, 212, 313, 313L, and one course selected from 321 or 324–324L, and 9 additional hours in biology. Other course requirements are Chemistry 113, 114, 213, 214; Physics 203, 204; Mathematics 101, 121; or 117, 172 or 151; Psychology 105; Education 305, 225d, 415, 225e, and 473. Persons interested in this concentration should consult with Dr. Hoffman.

The Bachelor of Science: General Science Secondary Education Major enables the student to receive secondary school general science certification. Students interested in this area should consult the detailed description in the interdisciplinary section of this catalog, page 105. Further information may be obtained from Dr. Hoffman.

The biology minor provides course options from which a student can choose courses to gain an overall view of the discipline of biology. The specific requirements are Biology 111 or 105-105L; one course from 112, 106-106L, or 108-108L; 212 or 215-215L; one course from 201, 235, 313-313L, 331, 332, 341, 342, 343, or 347; and one course from 202-202L, 321, or 324-324L. The total number of credit hours will be 19 or 20, depending on whether Biology 212 was taken. For a minor to be conferred, a minimum grade point average of 2.0 must be maintained in minor courses. To aid in course selection and career counseling, a co-advisor from the Biology Department should work with the student and his major advisor.

The biology preforestry program offers a biology concentration in the five-year cooperative program in forestry and environmental management with Duke University, leading to a bachelor of science degree from Elizabethtown College and a master of forestry or master of environmental management degree from Duke University. Students interested in this program should see the detailed description in the interdisciplinary section of this catalog, page 104. Further information may be obtained from Mr. Laughlin.

Biology prenursing program. In this program the student spends the first two years at Elizabethtown College and transfers to an affiliated institution for the junior and senior years.

Prenursing students should take Biology 111, 201, 202–202L, 235; Chemistry 101, 104; Mathematics 151; Psychology 105, 225, 322; Sociology 101; English 102, 105; 6 credits of philosophy and ethics; 6 credits of religion; 7 elective credits. Further information may be obtained from Dr. Heckman.

Elizabethtown's prenursing program is a flexible one permitting the student and advisor to design a unique curriculum that would allow transfer into many other upper-level university schools of nursing.

105 Principles of Biological Science

3 credits. (Core) Designed for the nonbiology major. An overview of basic biological principles and concepts, emphasizing their relevancy to our daily lives. Discussion of current issues and problems in an attempt to provide an understanding and respect for the basic mechanisms of life. *Corequisite: (to satisfy Core) Biology 105L (but cannot be taken for credit after completing Biology 111).*

105L Principles of Biological Science Laboratory

1 credit. (Core) Designed to accompany Biology 105, these laboratory exercises demonstrate many of the important biological principles covered in the lecture course. *Prerequisite or corequisite: Biology 105.*

106 Genetics, Evolution, and Man

3 credits. (Core) Designed for the nonbiology major. A discussion of the fundamentals of genetics as they relate to man, followed by a study of the mechanics of evolution, their significance, and the evolution of man. *Corequisite: (to satisfy Core) Biology 106L.* Spring semester.

106L Genetics, Evolution, and Man Laboratory

1 credit. (Core) A series of laboratory exercises intended to illustrate some of the principles of genetics and mechanisms of evolution. *Prerequisite or corequisite: Biology 106.* Spring semester.

108 Man and His Environment

3 credits. (Core) Designed for the nonbiology major. Discussion of basic principles of environmental interrelationships and a consideration of specific problem areas such as pollution, radiation, and population growth with regard to those principles. *Corequisite: (to satisfy Core) Biology 108L.* Spring semester.

108L Man and His Environment Laboratory

1 credit. (Core) Includes field trips to water and sewage treatment plants, testing for various contaminants in the environment, and exercises in measurement of energy consumption and environmental tolerance. *Prerequisite or corequisite: Biology 108.* Spring semester.

111 General Biology

4 credits. (Core) The study of the chemical and cellular basis of life, animal anatomy and physiology, cellular reproduction, heredity, and animal development. This course is designed for biology majors and those students taking additional biology courses beyond Biology 112. Hours: lecture 3, laboratory 2. Fall semester. *Cannot be taken for credit after completing Biology 105 without permission of instructor.*

112 General Biology

4 credits. (Core) The study of the evolution, diversity, and ecology of organisms, the animal kingdom, photosynthesis, plant anatomy and physiology, viruses, monera, and the plant kingdom. This course is designed for biology majors and those taking additional biology courses. Hours: lecture 3, laboratory 2. *Prerequisite: Biology 111.* Spring semester.

201 Human Anatomy

4 credits. (Core) A study of human structure at the tissue, organ, and system levels. Particular attention given to the correlation of structure to normal and abnormal function. Laboratory work involves dissection of a cat and human cadavers. Student enrollment limited to occupational therapy, nursing, and medical technology majors. Hours: lecture 2, laboratory 4. *Prerequisites: Biology 111, permission of instructor.* Fall semester.

202 Human Physiology

3 credits. (Core) A functional study of cells, tissues, organs, and organ systems of man; emphasis on disorders as they relate to the understanding of normal function. Enrollment limited to occupational therapy, nursing, and medical technology majors. *Prerequisites: Biology 111, permission of instructor.* Spring semester.

202L Human Physiology Laboratory

1 credit. (Core) A study of selected cardiovascular, respiratory, renal, muscular, neural, and endocrine control mechanisms; emphasis on "hands-on" manipulation of instruments useful to the health profession student. *Prerequisite or corequisite: Biology 202.* Spring semester.

212 Molecular Biology

3 credits. (Core) An integrated and comprehensive review of recent biological developments at the molecular level. Information, drawn from a wide variety of biological disciplines, concerning the interaction of biological molecules. *Prerequisite: Biology 112 or permission of instructor.* Spring semester.

215 Genetics

3 credits. (Core) A study of classical and neo-Mendelian principles of heredity. *Prerequisite: eight hours of biology or permission of instructor.* Fall semester.

215L Genetics Laboratory

1 credit. (Core) Techniques of genetic experimentation. *Prerequisite or corequisite: Biology 215.* Fall semester.

222: Immunology

3 credits. (Elective) A basic course in immunology encompassing immunity, serology, immunchemistry and immunobiology. Considered antigenic specificity, humoral and cellular effector mechanisms, hypersensitivities, immunogenetics, tolerance and enhancement, tissue and tumor immunity, as well as recent methodological advances. *Prerequisite: Biology 112 or permission of instructor.* Spring, alternate years.

235 General Microbiology

4 credits. (Core) A study of the morphological, physiological, cultural, and ecological characteristics of bacteria, as well as disease transmission and principles of control. A laboratory gives practice in the isolation and identification of bacteria. Hours: lecture 2, laboratory 5. *Prerequisites: Biology 112 and Chemistry 104 or 114, or permission of instructor.*

311 Biological Instrumentation and Research Methodology

3 credits. A practical and theoretical study of techniques, such as colorimetry, electrophoresis, ultracentrifugation, gas chromatography, tracer studies, electron microscopy, and flame photometry. Students are required to prepare experimental plans illustrating the use of each instrument and to perform a short-term experiment. Not only is instrumentation emphasized, but also the research skills of planning, data collection, data analysis, and evaluation are stressed. *Prerequisites: 15 credit hours of biology, 8 credit hours of chemistry.* Fall semester.

313 General Ecology

3 credits. (Core) The relationships between plants, animals, and their environment are investigated with regard to energy flow, mineral cycling, physical and chemical parameters, population changes, and community structure. *Prerequisite: 16 hours of biology or permission of instructor.* Fall semester.

313L General Ecology Laboratory

1 credit. (Core) Use of techniques and instrumentation for aquatic and terrestrial field studies, experimentation in such areas as population growth, competition, productivity, and mineral cycling. *Prerequisite or corequisite: Biology 313.* Fall semester.

321 Plant Physiology

4 credits. (Core) A study of plant growth and development, including a discussion of photosynthesis, mineral nutrition, carbon and nitrogen metabolism, water relations, and plant hormones. Hours: lecture 3, laboratory 4. *Prerequisites: Biology 112, and Chemistry 104 or 114; or permission of instructor.* Fall semester.

324 General Physiology

3 credits. (Core) A functional study of vertebrate organs and organ systems. Attention focused on similarities and specialization in relation to function, with emphasis on functional adaptations to the environment. *Prerequisite: Biology 112 or permission of instructor.* Spring semester.

324L General Physiology Laboratory

1 credit. (Core) An investigation of selected physiological mechanisms, employing spectrophotometers, datagraphs, spirometers, oscilloscopes, electrocardiographs, electrophoresis, and animal surgical techniques. *Prerequisite or corequisite: Biology 324.* Spring semester.

331 Comparative Plant Morphology

4 credits. (Core) A comparative study of the plant kingdom with emphasis upon the various levels of organization, structure, and the development and relationships of the major plant groups. Hours: lecture 3, laboratory 4. *Prerequisite: Biology 112.* Fall, alternate years.

332 Taxonomy of Vascular Plants

4 credits. (Core) Examination of family characteristics useful in plant identification, using live material and transparencies. Taxonomic principles and distribution of plants discussed. Plant collection and some Saturday trips required. Hours: lecture 3, laboratory 4. *Prerequisite: Biology 112.* Spring, alternate years.

341 Comparative Anatomy

4 credits. (Core) A comparative and embryological study of morphology of selected representatives from the phylum chordata. Laboratory work involves dissection and demonstration of organisms from major chordate groups. Hours: lecture 2, laboratory 4. *Prerequisite: Biology 112.* Fall semester.

342 Developmental Biology

4 credits. (Core) A survey of biological development covering the molecular, cellular, and organismic levels with special emphasis on control mechanisms. The laboratory emphasizes vertebrate animal development. Hours: lecture 2, laboratory 4. *Prerequisite: Biology 215.* Spring semester.

343 Histology and Biomedical Technique

4 credits. (Core) A basic microscopic study of vertebrate tissues. The laboratory includes biomedical techniques of paraffin sectioning, staining, and slide preparation. Hours: lecture 2, laboratory 4. *Prerequisite: Biology 112.* Spring semester.

347 Invertebrate Zoology

4 credits. (Core) A study of the evolution of invertebrate animals from simple to complex forms, structural and functional similarities and differences, and the evolutionary trends necessary for an understanding of basic adaptive features. Hours: lecture 2, laboratory 4. *Prerequisite: Biology 112 or permission of instructor.* Fall, alternate years.

352 Applied Microbiology

4 credits. (Core) A study of microorganisms as they relate to their natural environment, food processing, and public health. Hours: lecture 2, laboratory 5. *Prerequisites: Biology 235, Chemistry 114.* Offered upon demand.

370-379 Special Topics in Biology

Variable credit. (Core) Courses of a specialized nature reflecting the interests of the instructor. Courses offered on a random basis.

380-389 Directed Study in Biology Topics

Variable credit. (Core) Directed study in biological areas in which the student meets regularly with the instructor on an individual basis. Laboratory work may include self-directing aids. *Prerequisite: permission of instructor.*

412 Seminar in Biology

2 credits. (Core) An original research investigation planned and performed by students in consultation with faculty. A paper will be written, and major findings will be presented orally to faculty and peers. *Prerequisite: Biology 311.* Spring semester.

480-489 Independent Problems in Biology

Variable credit. (Core) Designed to allow the student to do independent research in some phase of biology. *Prerequisites: 16 credits in biology, permission of instructor and Department Chair.*

Education 305 Practicum in Secondary Education: Science

4 credits. Teaching science in secondary schools. *Prerequisite: Psychology 105; corequisite: Education 225d.* Fall, alternate years.

DEPARTMENT OF BUSINESS

Professor Bitting, Kish

Associate Professors Buffenmyer (*Chair*),
Eppley, Evans, Gliptis, C. Kreider, Neyer,
Pomroy, Trostle

Assistant Professors Akcay, Beyerlein, S.
Dolan (*Associate Chair*), Hoppie, Muston,
van Arsdale

Instructor FitzGerald

Bachelor of Arts; Bachelor of Science

The primary objective of the Department of Business is to provide comprehensive programs of professional education for young men and women who wish to achieve responsible positions in private and public business organizations and in academic institutions. These programs are based strongly on the tradition of a liberal arts education. Their general objectives are to prepare contemporary and future leaders, to develop a broad understanding of the nature of business and its role in society, to enlarge the students' competence in the qualities for success in the business world, and to provide the foundation for graduate study, continuing self-education, and personal development.

The Department of Business offers four majors:

Bachelor of Science in Accounting. Preparation for entrance into the profession of accounting (public, private, or governmental) requires a basic business core in addition to a proficiency in accounting. Because of the increased emphasis upon computer and quantitative techniques by business, students are urged to elect additional courses in these areas.

Bachelor of Science in Business Administration. Preparation to become tomorrow's business leader requires a broad background in business, a knowledge of the behavioral and social sciences, and the ability to use quantitative techniques in solving problems. This background and these basic tools will emerge from the business core, the General Education Core, and specific mathematics requirements. A student will gain further understanding of specific areas of business by concentrating in one or more of seven areas: *accounting, business education, computer science/business information systems, economics, finance, management, or marketing.* A student may also select a secondary area of

concentration in *communications, international business, or health science.*

Business administration offers a concentration in the forestry and environmental major. Students interested in this major should consult the detailed description in the interdisciplinary section of this catalog, page 104.

A bachelor of science degree in accounting or business administration may be earned in the evening program of the College. For further information see the special Evening Session bulletin.

Bachelor of Science in Business Education.

For students who plan to teach in the business department of a secondary school, the business education curriculum provides a liberal training in courses outside the field of business, a broad background in business, depth in at least two certification areas in business, and professional education. The professional training will be conducted by personnel who have been secondary business teachers and who maintain an awareness of current developments through close relationships with business departments in area high schools and vocational-technical schools.

Bachelor of Arts or Science in Economics.

Preparation for a career in economics requires a broad background in basic economic theory coupled with an in-depth study of the quantitative tools so important to today's economist. The economics curriculum is designed to provide the student with this breadth and depth. In light of the emphasis on the quantitative approach to economic theory, students are advised to select courses in mathematics and computer science beyond those specifically required in the economics curriculum.

Economics is one of the major areas in the social studies major, preparing a student for certification to teach in secondary schools. Students with interests in this area should consult the detailed descriptions in the interdisciplinary section of this catalog, page 105.

The Department of Business offers two minors: a *minor in business* and a *minor in economics*. Consult the Chair of the Department for specific course requirements.

ACCOUNTING

A major in accounting includes Accounting 105, 106 (or 107, 108), 205, 206, 305, 306, 12 additional semester hours in accounting; Business Administration 215, 248, 265, 325, 331, 332; Computer Science 120 or 121; Economics 101, 102; Mathematics 117 or 121, and 151.

BUSINESS ADMINISTRATION

A major in business administration includes Accounting 107, 108 (or 105, 106); Business Administration 215, 248, 265, 325, 331, 332; Computer Science 120 or 121 (Computer science concentrations must take Computer Science 121.); Economics 101, 102; Mathematics 117 or 121, and 151. Each student must also choose one of the concentrations described below; twelve semester hours beyond those listed above must be taken in the concentration area (Nine of those twelve hours must be taken on the Elizabethtown College campus.). A student may also elect a secondary concentration.

For an **Accounting Concentration** Accounting 205, 206, and two other accounting courses from the departmental advising sheet are required. A **Business Education Concentration** requires typewriting proficiency, Business Education 305, 421; Education 225d; and the completion of one of four options: accounting, computer science, marketing, or secretarial. A **Computer Science/Business Information Systems Concentration** requires Computer Science 135, 335, 340 and one other three-credit course in computer science. An **Economics Concentration** requires Economics 301, 302, and two other economics courses. A **Finance Concentration** requires Business Administration 424, 425, and two of the following: Business Administration 327, Economics 303 or 304. The **Management Concentration** requires Business Administration 369, 499, and two other management courses from the departmental advising sheet. A **Marketing Concentration** requires Business Administration 311, 498, and two other marketing courses from the departmental advising sheet.

A **Secondary Concentration in International Business** requires competency at the 112 level in a modern language, Anthropology 211, Political Science 205, Economics 307, and two other courses from the departmental advising sheet. A **Secondary Concentration in Health Science** requires four additional courses from biology and/or chemistry according to the departmental advising sheet. A **Secondary Concentration in Communications** requires Business Administration 355, Communications 105, English 185, and two other courses from the departmental advising sheet.

BUSINESS EDUCATION

A major in business education includes Accounting 105, 106; Business Administration 215, 248, 265, 325, 331, 332; Business Education, 421; Computer Science 120 or 121; Economics 101, 102; Mathematics 117 or 121, and 151; Psychology 105; and the professional education program for secondary certification: Education 415, 225d, 225e; Business Education 305, 473 (Education 305, 473). Each student must also choose two or more of the following certification areas: accounting, computer science, marketing, secretarial, typewriting. Speech proficiency is also required.

ECONOMICS

A major in economics includes Economics 101, 102, 301, 302, 309, 15 additional semester hours in economics; Computer Science 120 or 121; Mathematics 121, 151, and 172; nine semester hours of history; and nine semester hours of political science and/or sociology.

ACCOUNTING

Note: Students who complete Accounting 105 may not enroll in Accounting 107 or 108 unless the Department of Business specifically allows them to do so. Likewise, students who complete 107 may not enroll in 105 or 106. The proper course sequence is either 105–106, or 107–108.

105 Principles of Accounting I

3 credits. An introductory course for students who intend to continue in accounting courses. The accounting cycle, financial statements, and assets. Fall semester.

106 Principles of Accounting II

3 credits. A continuation of 105. Liabilities, equity accounts, ratio analysis, and introduction to cost accounting. *Prerequisite:* Accounting 105. Spring semester.

107 Financial Accounting

3 credits. An introductory course designed to acquaint the student with basic accounting methodology and the structure and interpretation of financial statements used in external reporting. Fall semester.

108 Managerial Accounting

3 credits. A study of the use of information gathered from accounting records and other information sources to prepare internal reports and analyses in order to assist management in control and decision-making. *Prerequisite:* Accounting 107. Spring semester.

205 Intermediate Accounting I

3 credits. A thorough study of various accounting concepts and generally accepted accounting principles; the application of these principles to the various assets and related revenue and expense accounts as presented in the income statement and balance sheet. Emphasis on valuation, classification, disclosure, and cut-off. *Prerequisite:* Accounting 106 or permission of instructor. Fall semester.

206 Intermediate Accounting II

3 credits. A continuation of 205. The principles of valuation, classification, disclosure, and cut-off applied to the various liability and owners' equity accounts as well as their related revenues and expenses. Topics include the study of various items affecting income determination, the statement of changes in financial position, and ratio analysis. *Prerequisite: Accounting 205.* Spring semester.

301 Introduction to Federal Income Taxes

3 credits. A study of those provisions of the Internal Revenue Code which apply to individual taxpayers and sole proprietors. Students without a business background are encouraged to enroll. Fall semester.

302 Advanced Tax Accounting

3 credits. Further study of the Internal Revenue Code as it relates to partnerships, corporations, trusts and estates, and exempt organizations. State taxation of business is also covered. *Prerequisite: Accounting 301.* Spring semester.

305 Cost Accounting

3 credits. The quantitative aspects of managerial cost accounting, including cost-volume-profit analysis, budgeting, standard costs, and the concept of relevant costs. *Prerequisite: Accounting 106 or 108; or permission of instructor.* Fall semester.

306 Advanced Cost Accounting

3 credits. A continuation of the managerial emphasis on cost accounting, including capital budgeting, inventory control, joint-and-by-product costing, and process cost accounting. *Prerequisite: Accounting 305.* Spring semester.

308 Accounting for Nonprofit Organizations

3 credits. An in-depth study of the principles and uses of fund accounting; includes the budgeting process, reporting requirements for general and special financial statements, and management's uses for control and decision-making as they relate to the general operating fund, as well as restricted and nonrestricted special funds. *Prerequisite: Accounting 106 or 108.* Spring semester.

370-379 Special Problems

3 credits. A course designed to allow students to explore topics and problems of current relevance in accounting.

405 Auditing

3 credits. The legal and ethical responsibilities of an auditor, the methods and procedures used in gathering evidential material, and the auditor's report. *Prerequisite: Accounting 206.* Fall semester.

406 Advanced Accounting

3 credits. A detailed study of accounting theory, income statement presentation, consolidations, partnerships, and foreign exchange accounting. *Prerequisite: Accounting 206.* Fall semester.

409 Contemporary Problems for C.P.A.'s

3 credits. A capstone course in accounting designed to assimilate the widely varying aspects of public accounting and update the student in the latest standards and problems. *Prerequisites: Accounting 302, 405, 406; or permission of instructor.* Spring semester.

471 Internship in Accounting

Variable credit. A series of work experiences in accounting with either a public accounting firm, a business firm, or governmental agency. *Prerequisite: approval of Department Chair.*

480-489 Independent Study

Variable credit. Designed to allow the student to do independent study and research on a problem or topic in the field of accounting. *Prerequisites: approval of Department Chair and Dean of the Faculty.*

499 Seminar in Accounting

3 credits. A study of selected topics currently under discussion in the accounting field. A major research project will be required. Offered upon student demand and faculty availability. *Prerequisite: permission of instructor.*

BUSINESS ADMINISTRATION**215 Principles of Marketing**

3 credits. A study of the development and implementation of marketing strategies and practices with particular emphasis on the role of marketing in business and society. *Prerequisite or corequisite: Economics 102.*

248 Quantitative Techniques for Business

3 credits. Designed to develop familiarity with statistical and mathematical methods applicable to business; includes Bernoulli and Bayesian probability, decision theory, inventory models, linear programming, queuing theory, and network models. *Prerequisites: Mathematics 151, 117.*

265 Principles of Management

3 credits. A study of the process of using and coordinating technical and human resources in planning, organizing, staffing, motivating, and controlling to achieve an organization's objectives.

311 Principles of Marketing Research

3 credits. Employs scientific research methodology to solve marketing problems. Covers research design, data collection, sampling, and analysis. Stresses writing meaningful reports for managerial use. *Prerequisites: Business Administration 215, Mathematics 151.* Fall semester.

312 Principles of Advertising

3 credits. Involves the creative and business management aspects of advertising, including campaign strategy, mass media, the advertising agency, creative techniques, advertising research, and social accountability. *Prerequisite: Business Administration 215 or permission of instructor.* Spring semester.

313 Retailing Management

3 credits. A study of retailing institutions including institutional location, layout, managerial objectives and policies, consumer behavior, pricing and promotional strategies, consumer services, and expected trends. *Prerequisites: Business Administration 215, 265.* Fall semester.

316 Marketing Management

3 credits. The formulation of overall marketing policies and the planning techniques for embodying these policies in marketing programs. Case analysis is stressed. *Prerequisites: Business Administration 215, 248, 265.*

317 International Marketing

3 credits. Focus on marketing management problems, techniques and strategies in the framework of the international marketing area, and understanding different cultures and environments in order to establish effective marketing programs. *Prerequisite: Business Administration 215.*

325 Business Finance

3 credits. Analyzes the management of funds of a business, including long- and short-term sources of funds, ratio analysis, capital budgeting, the cost of capital, and the dividend decision. *Prerequisite: Accounting 106 or 108.*

327 International Finance

3 credits. Explores the international finance environment in which economic policy and business decisions are made. Provides an introduction to international finance including the spot and forward exchange markets, the Eurocurrency market, international capital markets, international capital movement, and foreign exchange risk management. *Prerequisite: Business Administration 325.*

331 Business Law I

3 credits. Legal principles applicable to business with emphasis on contract law. Includes the growth of law as an institution. Fall semester.

332 Business Law II

3 credits. The study of legal principles applicable to business with emphasis on partnership, corporation, and property law. *Prerequisite: Business Administration 331 or permission of instructor.* Spring semester.

333 Legal Problems in Business

3 credits. An examination of statutes, problems, and issues in selected areas of the law appropriate to business. *Prerequisite: permission of instructor.* Spring semester.

355 Managerial Communications

3 credits. A study of the various communication techniques for management and business. Emphasis on analysis and writing of business letters; report development, writing and presentation; and the organization of materials for effective oral and written presentations. *Prerequisite: permission of instructor.*

369 Behavioral Theory in Management

3 credits. An examination of the interaction of the individual, group, and enterprise in the work environment with special attention to the basic motivational, organizational, and leadership theories and their application. *Prerequisites: Psychology 105, Business Administration 265.* Fall semester.

370-379 Special Problems

3 credits. A course designed to allow students to explore topics and problems of current relevance in business.

424 Investments

3 credits. Emphasis on various classes of investments available to the investor; sources and uses of investment information; and security and markets evaluation. *Prerequisite: Business Administration 325.* Spring semester.

425 Problems in Financial Management

3 credits. An advanced course in corporation finance in which major topic areas such as capital budgeting, working capital management, leasing, mergers, and financing are examined in depth. Cases, readings, and more complex problems are used to illustrate the concepts covered. *Prerequisite: Business Administration 325.* Spring semester.

466 Operations Management

3 credits. A critical study of decision-making techniques, emphasizing the practical application of scientific methods to production activities; topics include resource allocation, production cycle, work simplification, plant layout, and process control. *Prerequisites: Business Administration 248, 369, Economics 102.* Spring semester.

467 Personnel Management

3 credits. Analysis of the principles, concepts and practices of procurement, development, maintenance, and utilization of personnel in organizations. *Prerequisite: Business Administration 265.* Spring semester.

468 Industrial and Labor Relations

3 credits. Analysis of employment relationships; union philosophy, structure and function; collective bargaining, and the interrelated interests of management, union, workers, and the community. *Prerequisite: Business Administration 369 or permission of instructor.* Fall semester.

471 Internship in Business

Variable credit. Work experiences designed to supplement course work. Students gain valuable knowledge and experience not available from textbooks. *Prerequisite: approval of Department Chair.*

480-489 Independent Study

Variable credit. Designed to allow the student to do independent study and research on a problem or topic in the field of business. *Prerequisites: approval of Department Chair and Dean of the Faculty.*

495 Business Policy

3 credits. A capstone course for any business major, integrating concepts, principles, and practices from prior courses. Provides a comprehensive study of the interrelationships between management theory, problem analysis, and strategy formation for the contemporary enterprise. *Prerequisites: senior status and permission of instructor.*

498 Seminar in Marketing

3 credits. Synthesizes the literature in consumer behavior, quantitative methods in marketing, and policy issues. *Prerequisites: Business Administration 215, 311, and two other courses required for the marketing concentration, or permission of instructor.* Spring semester.

499 Seminar in Management

3 credits. Advanced study focusing on current management concepts and contemporary problems in the business enterprise. Various topics will be selected in the area of the students' interests. *Prerequisites: Business Administration 248, 265, 369, and two other courses required for the management concentration, or permission of instructor.*

BUSINESS EDUCATION**101 Elementary Gregg Shorthand**

3 credits. Introduction to Gregg Shorthand Series 90; instruction in theory, and in reading and writing shorthand rapidly and accurately. For students with no training in shorthand. Fall semester.

111 Elementary Typewriting

3 credits. Fundamental typewriting techniques: machine operation, keyboard technique, letter forms, tabulation, manuscript form. For students with no formal training on the typewriter. Fall semester.

201 Intermediate Gregg Shorthand

3 credits. An intensive study of Gregg Shorthand Series 90; emphasis upon developing the student's ability to take dictation on unfamiliar material rapidly and to transcribe accurately at the typewriter. *Prerequisites: Business Education 101, 111; or permission of instructor.* Spring semester.

211 Intermediate Typewriting

3 credits. A concentrated training on the typewriter; business letters, special communication forms, technical papers, business reports, tables, business forms, executive communications, and application forms. *Prerequisite: Business Education 111 or permission of instructor.* Spring semester.

221 Mathematics for Business

3 credits. Review of fundamental processes, with emphasis on accuracy and speed in computations. These skills are applied to problem solving in personal and business situations. Enrollment limited to business education majors.

223 Business Communications

3 credits. Effective and functional written and oral business communications. Enrollment limited to business education majors.

301 Advanced Gregg Shorthand

1 credit. The study of methods and materials used in teaching shorthand in the secondary school. Enrollment limited to business education students. *Prerequisites: Business Education 201, 211; or permission of instructor.*

305 Practicum in Secondary Education: Business (Education 305)

4 credits. Instructional methodology of business education and in-school experience integrated under the guidance of a clinical professor representing the academic major. *Prerequisite: Psychology 105; corequisite: Education 225d.*

311 Advanced Typewriting

1 credit. The study of methods and materials used in teaching typewriting in the secondary school. Enrollment limited to business education students. *Prerequisite: Business Education 211 or permission of instructor.*

370-379 Special Problems

3 credits. A directed learning experience designed to allow students to explore current topics of special relevance in the field of business education.

421 Office Practice

1 credit. The study of methods and materials for teaching secretarial procedures and business machines. Enrollment limited to business education majors. *Prerequisite: Business Education 111 or permission of instructor.*

473 Professional Internship, Secondary (Education 473)

12 credits. Student teaching in a secondary classroom. *Prerequisite: Education 305.*

480-489 Independent Study

Variable credit. Designed to allow the student to do independent study and research on a problem or topic in the field of business education. *Prerequisites: approval of Department Chair and the Dean of the Faculty.*

ECONOMICS**101 Principles of Economics I**

3 credits. (Core) The principles and problems of economics. Topics include supply and demand, the United States economic system, national income accounting, employment theory, fiscal policy, money and banking, and monetary policy. Does not fulfill Core requirement for students majoring in accounting, business administration, or business education.

102 Principles of Economics II

3 credits. (Core) Continuation of 101. Topics include elasticity, consumer behavior, production costs, market structures (competition, oligopoly, monopoly), and resource pricing. Does not fulfill Core requirement for students majoring in accounting, business administration, or business education. *Prerequisite: Economics 101 or permission of instructor.*

301 Intermediate Microeconomic Theory

3 credits. (Core) An in-depth study of corporate decision-making and resource allocation within the economic environment of free enterprise. *Prerequisites: Economics 101, 102; Mathematics 121 or 117. Fall semester 1985.*

302 Intermediate Macroeconomic Theory

3 credits. (Core) Development of macroeconomic theories of output, employment, inflation and growth, monetary and fiscal policies, and analysis. *Prerequisites: Economics 101, 102; Mathematics 121 or 117. Fall semester 1986.*

303 Money and Banking

3 credits. (Core) A study of the United States money and banking systems, including commercial banking, the Federal Reserve System, monetary theory and policy, interest rates, money markets. *Prerequisites: Economics 101, 102; or permission of instructor. Spring semester.*

304 Public Finance

3 credits. (Core) An application of macroeconomic theory to the problems of federal, state, and local taxation, expenditures and debt management. *Prerequisite: Economics 102. Spring semester.*

306 Development of Economic Thought

3 credits. (Core) The historical and philosophical evolution of economic ideas and schools of thought from Smith, Ricardo, and Marx to Marshall and Keynes. Spring semester 1986.

307 International Economics

3 credits. (Core) A study of the basic concepts of international trade, international payments, and commercial policy, combining economic theory, policy, and practice. *Prerequisite: Economics 101 or permission of instructor.* Fall semester.

308 Comparative Economic Systems

3 credits. (Core) Examination, criticism, and appraisal of alternative economic systems: capitalism, socialism, communism, and mixed economic systems. *Prerequisite: Economics 101 or permission of instructor.* Fall semester 1985.

309 Introduction to Mathematical Economics

3 credits. (Core) An application of algebra and elementary calculus to further elaborate economic concepts and problems. *Prerequisites: Economics 101, 102; Mathematics 121 or 117.* Fall semester 1985.

370-379 Special Problems

3 credits. (Core) A course designed to allow students to explore topics and problems of current relevance in economics.

480-489 Independent Study

Variable credit. (Core) Designed to allow the student to do independent study and research on a problem or topic in the field of economics. *Prerequisites: approval of Department Chair and Dean of the Faculty.*

HEALTH CARE

322 Health Laws, Issues, and Public Policies

3 credits. An examination of important laws, issues, and public policies pertinent to health care, with attention to regulatory authority, liability, and social policy. *Prerequisite: permission of instructor.* Fall semester 1985.

BUSINESS ADMINISTRATION

See Department of Business, page 47.

BUSINESS EDUCATION

See Department of Business, page 47.

DEPARTMENT OF CHEMISTRY

Professors Hedrick, Proctor (*Director of Medical Technology*), Ranck, Spangler
Associate Professors Reeder (*Chair*),
Schaeffer

Bachelor of Science

Professional Accreditation: The Elizabethtown College Chemistry Department is on the approved list of the American Chemical Society, Committee on Professional Training. The affiliation of Elizabethtown College with seven accredited hospitals is recorded with the National Accrediting Agency for Clinical Laboratory Sciences.

Chemistry courses contribute to both the liberal arts component and the professional component of that pragmatic mixture of studies that Elizabethtown College seeks to foster. Students may choose chemistry as part of their General Education Core requirements, as an elective, as a minor area of study, or as a major area of study leading to a career which requires an in-depth knowledge of chemistry.

Students majoring in chemistry typically go on to graduate studies in chemistry or biochemistry, to hospital or industrial laboratories, to the study of medicine, to secondary education, or to sales positions in the chemical industry.

The Department of Chemistry offers two majors: one in biochemistry and the other in chemistry with a choice of concentrations; and minors in chemistry and biochemistry.

The Bachelor of Science in Biochemistry prepares students for medical school or other health professions schools, graduate study in biochemistry and related fields, or employment that requires baccalaureate education. Premedical and other health professions programs are discussed on p. 102.

The Bachelor of Science in Chemistry offers five concentrations: the American Chemical Society approved professional chemistry curriculum; the medical technology curriculum; and the secondary education certification, chemistry management, and chemical physics curricula. The American Chemical Society option prepares the student for graduate school or for a career in industrial or government laboratories. The secondary education curriculum prepares students for high school teaching. The chemistry management option is

preparation for sales or management positions in chemical and related industries, and chemical physics is a foundation for work at the interface between chemistry and physics.

There are two options within the **medical technology curriculum** offered in cooperation with hospital programs accredited by the American Medical Association's Committee on Allied Health and Accreditation (CAHEA). Most students choose the option requiring three years (100 semester hours) at Elizabethtown College plus a 12-month period of study at a hospital approved by the American Medical Association and Elizabethtown College. The degree is awarded upon the recommendation of the pathologist or program supervisor of the hospital and the medical technology director of the College. Elizabethtown College is affiliated with Harrisburg Hospital, Polyclinic Hospital (Harrisburg), York Hospital, Lancaster General Hospital, St. Joseph Hospital (Lancaster), Abington Hospital (Abington, Pennsylvania) and Reading Hospital. The second option requires four years at Elizabethtown College followed by a clinical year, although the clinical year is not required for a degree from Elizabethtown College when this second option is chosen.

Minors in chemistry and biochemistry prepare students to apply chemical concepts and practices in their major discipline.

Additional options may be tailored to the student's needs in consultation with the student's adviser and the Department Chair. Students planning much work in chemistry should consult with a departmental adviser as early as possible to plan the sequence of courses in chemistry, mathematics, physics, biology, and modern foreign language which will be to their greatest advantage. Many upper-level chemistry courses have calculus and physics courses as prerequisites, making their early completion desirable. The sequence in secondary education also requires early planning to insure proper spacing of education courses.

The biochemistry curriculum requires Chemistry 113, 114, 213, 214, 242, 323, 323L, 324, 324L, 361-2, 363-4, 490, 491; Biology 111, 112, 324, 324L; 12 semester hours of additional biology and/or chemistry, 6 of which must be in biology; Computer Science 115; Mathematics 122; Physics 231; and Modern Language*.

The A.C.S. approved curriculum requires Chemistry 113, 114, 213, 214, 242, 323, 323L, 324, 324L, 343, 344, 351, 352, 361-2, 363-4, 402, 421, 490, 491; Computer Science 115; Mathematics 222; Physics 231; and Modern Language*.

The medical technology curriculum requires Chemistry 113, 114, 213, 214, 361-2, 323, 323L, 324, 324L; 16 semester hours of biology which must include Biology 111, 112, 222, and 235; Computer Science 115; Mathematics 101 or 121, 151; and Physics 203. For students attending Elizabethtown for three years, these required courses plus General Education Core and electives must total 100 semester hours. The clinical year

includes a minimum of 28 additional semester hours. For those attending Elizabethtown for four years, additional requirements are Chemistry 242, 363-4, 490, 491; Mathematics 122; Physics 204; and two additional courses in biology or chemistry.

The secondary education curriculum requires Chemistry 113, 114, 213, 214, 242, 343, 351, 361-2, and one additional chemistry course; Computer Science 115; Mathematics 222; Physics 231; Modern Language*; Psychology 105; and Education 305, 225d, 415, 225e, and 473. The department also participates in the general science certification program. For a detailed listing, see p. 105.

The chemistry management curriculum requires Chemistry 113, 114, 213, 214, 242, 343, 351, 361-2, 363-4, and one additional chemistry course; Computer Science 115; Mathematics 222; Physics 231; Modern Language*; Accounting 107; Business Administration 215, 265, 325, 332, 369, 466; and Economics 101, 102.

The chemical physics curriculum requires Chemistry 113, 114, 213, 214, 242, 343, 344, 351, 352, 361-2, 363-4, 490; Computer Science 115; Mathematics 222; Physics 232, 344; Modern Language*; and a minimum of seven semester hours from the following courses: Chemistry 402, 421, 491; Mathematics 362; Physics 404, 407, 408, 490.

A minor in chemistry requires Chemistry 113, 114, 213, 214, and a minimum of four additional semester hours of chemistry.

A minor in biochemistry requires Chemistry 113, 114, 213, 214, and a minimum of four additional semester hours of biochemistry.

*A modern language is defined as one taught by the Department of Modern Languages at Elizabethtown College or specifically approved by the Department of Chemistry. A chemistry or biochemistry student can fulfill the Department language requirement in any one of the following ways:

- 1) Proving competence in a modern language at the 112 level by examination.
 - 2) Satisfactory completion of a 112-level modern language course.
 - 3) Satisfactory study of a second modern language, not previously studied by the student, as determined for each individual by the Department faculty.
-

101 General Chemistry I

4 credits (Core). A general survey for students requiring only one year of chemistry. Hours: lecture 3, laboratory 3. Fall semester.

104 General Chemistry II

4 credits. (Core) A continuation of Chemistry 101. Hours: lecture 3, laboratory 3. *Prerequisite: Chemistry 101. Spring semester.*

113 Organic Chemistry I

4 credits. (Core) The introductory course for those students who require more than one year of chemistry. A study of stoichiometry, bonding, geometry, equilibrium, kinetics, and instrumentation applied to carbon compounds. Hours: lecture 3, laboratory 3. *Prerequisites:* high school chemistry and algebra or equivalent. (Only 2 credits will be awarded for Chemistry 113 for those students who have satisfactorily completed Chemistry 104.) Fall semester.

114 Organic Chemistry II

4 credits. (Core) A continuation of Chemistry 113 emphasizing synthesis and reaction mechanisms. Hours: lecture 3, laboratory 3. *Prerequisite:* Chemistry 113. Spring semester.

116 Selected Topics in Organic Chemistry

1 credit. Selected exercises for students desiring additional experience in organic chemistry laboratory. Hours: laboratory 3. *Prerequisite or corequisite:* Chemistry 114; permission of instructor. Spring semester.

213 Analytical Chemistry I

4 credits. (Core) An introduction to quantitative analysis integrating classical and instrumental methods. Hours: lecture 2, laboratory 6. *Prerequisite:* Chemistry 114. Fall semester.

214 Analytical Chemistry II

4 credits. (Core) A continuation of Chemistry 213 with added emphasis on instrumental methods and computer systems interfacing. Hours: lecture 2, laboratory 6. *Prerequisite:* Chemistry 213. Spring semester.

242 Chemical Equilibrium and Kinetics

3 credits. (Core) An introduction to thermodynamics as applied to chemical equilibria in ideal and nonideal, homogeneous, and heterogeneous systems. Kinetics, ionic solutions, and electrochemistry are also treated. *Prerequisites or corequisites:* Chemistry 214, Mathematics 122, Physics 204 or 231. Spring semester.

323 Biochemistry I

3 credits. (Core) An introduction to the chemistry of living matter treating the structures, metabolism, and functions of proteins, lipids, carbohydrates, and nucleic acids. *Prerequisites:* Chemistry 213 and Biology 112 or its equivalent. Fall semester.

323L Biochemistry I Laboratory

1 credit. (Core) An introduction to techniques used in experimental investigations in biochemistry. Hours: laboratory 4. *Corequisite:* Chemistry 323. Fall semester.

324 Biochemistry II

3 credits. (Core) A continuation of Chemistry 323. *Prerequisite:* Chemistry 323. Spring semester.

324L Biochemistry II Laboratory

1 credit. (Core) A continuation of Chemistry 323L. Hours: Laboratory 4. *Prerequisite:* Chemistry 323L; *corequisite:* Chemistry 324. Spring semester.

333 Computer Systems Interfacing (Computer Science 333, Physics 333)

3 credits. Digital logic and integrated circuits to implement logic; architecture and machine language, programming minicomputers and microprocessors; design, testing, and construction of instrument-to-computer and computer-to-computer interfaces; design and testing of supporting software. Hours: lecture 1, laboratory 6. Fall semester.

343 Introduction to Quantum Theory (Physics 343)

3 credits. (Core) An introduction to the history and principles of quantum theory, radiation, atomic spectra, and the extranuclear structure of the atom. *Prerequisite:* Chemistry 242. Fall semester.

344 Molecular Structure and Mechanics

3 credits. (Core) An extension of quantum theory to molecules and condensed states of matter. Includes principles of optical and magnetic resonance spectroscopy for molecular structure determination and statistical mechanics as a basis for chemical equilibrium and reactivity. *Prerequisite:* Chemistry 343. Spring semester.

351 Advanced Chemistry Laboratory I

4 credits. (Core) Designed primarily to acquaint the student with synthetic methods in inorganic chemistry as well as product purification and identification. Hours: lecture 2, laboratory 8. *Prerequisite:* Chemistry 242. Fall semester.

352 Advanced Chemistry Laboratory II

2 credits. (Core) Problems and experiments in the determination of molecular structure. Hours: laboratory 6. *Corequisite:* Chemistry 344. Spring semester.

361,-2 Chemistry Seminar I, II

1 credit. A two-semester sequence in which a student must present a minimum of one seminar and regularly attend those presented by other students. A student must enroll in both courses to receive credit which is given upon completion of 362. Hours: seminar 1. Fall semester, spring semester.

363,-4 Chemistry Seminar III, IV

1 credit. A two-semester sequence in which the student must present a minimum of one seminar and regularly attend those presented by other students. The student must enroll in both courses to receive credit which is given upon completion of 364. Hours: seminar 1. Fall semester, spring semester.

370-379 Special Topics in Chemistry

Variable credit. (Core) Study of an advanced topic, experimental or theoretical, of interest to the student. *Prerequisites: permission of instructor and Department Chair.*

402 Advanced Inorganic Chemistry

3 credits. (Core) A study of the elements and their compounds based upon atomic and molecular structure. *Prerequisite: Chemistry 344.* Spring semester.

421 Advanced Organic Chemistry

3 credits. (Core) A study of organic reactions based on experimental and advanced theoretical studies. *Prerequisite: Chemistry 344.* Fall semester.

460-469 Clinical Courses in Medical Technology

28 credits (minimum). Instruction during the clinical year includes the following courses.

Clinical Microbiology—Identification and clinical pathology of bacteria, fungi, viruses and parasites. Techniques to isolate, stain, culture, and determine antimicrobial susceptibility. Instrumentation; quality control.

Clinical Chemistry—Enzymology, endocrinology, biochemistry of lipids, carbohydrates and proteins, metabolism of nitrogenous end products, physiology and metabolism of fluids and electrolytes, and toxicology as related to the body and diseases. The technical procedures include colorimetry, spectrophotometry, electrophoresis, chromatography, automation and quality control.

Clinical Hematology/Coagulation—The composition and function of blood; diseases related to blood disorders; the role of platelets and coagulation. Manual and automated techniques of diagnostic tests for abnormalities.

Clinical Immunohematology—Blood antigens, antibodies, crossmatching, hemolytic diseases, and related diagnostic tests. An in-depth study of blood donor service and its many facets such as transfusions, medico-legal aspects, etc.

Clinical Immunology/Serology—Immune response, immunoglobulins, autoimmunity and complement and related tests and diseases. Survey and demonstration of serological diagnostic tests.

Clinical Seminar—Other courses which are not included in the above (such as orientation, laboratory management, education, clinical microscopy) and/or are unique to the individual hospital program.

Prerequisite: admission to the medical technology school of the cooperating hospital.

490-495 Research in Chemistry

Variable credit. (Core) An original experiment or theoretical investigation under the close supervision of a faculty member. Experimental design and a written report are required. *Prerequisite: permission of instructor.*

Education 305 Practicum in Secondary**Education: Science**

3 credits. Teaching science in secondary schools. *Prerequisite: Psychology 105; corequisite: Education 225d.*

DEPARTMENT OF COMMUNICATIONS

Professor Riley

Associate Professors Moore (*Chair*), Smith
Assistant Professor Wennberg

Bachelor of Arts

The Department of Communications offers a comprehensive preparation in the field of Communications firmly grounded in a well-rounded liberal arts education. In addition to developing skills in written, spoken, and visual communications, students learn the theory, design, management, and production of communication. Courses in oral communication, graphics, audio and video production, among others, permit upperclass majors to advance into areas of concentration within the field. These include Corporate Media, Public Relations, and Mass Communication.

Department facilities are located in the newly renovated Steinman Center for Communications and Art. This center provides communications students with modern equipment in new audio and video studios and photography, graphics, and multi-image laboratories, and houses the student radio station, WVEC.

The curriculum is complemented by a number of departmental student organizations: WVEC Radio, Photography Club, Forensics Club, Women in Communications, Society for Collegiate Journalists, Sock and Buskin, Alpha Psi Omega (Honorary Dramatic Fraternity), Delta Sigma Rho-Tau Kappa Alpha (Honorary Forensics Fraternity). In addition, *The Etownian* (student newspaper) and the *Conestogan* (yearbook), as nondepartmental student activities, provide excellent journalism experiences for majors. These organizations sponsor speakers, workshops, contests, and trips designed to enhance campus life and especially to make the student's classroom experience more meaningful.

A well-defined curriculum, complemented by many cocurricular activities, prepare Elizabethtown College communications graduates for careers in corporate and institutional communications, public relations, broadcasting, newspaper and magazine writing and reporting, advertising, sales, law, the ministry, and many more.

The 48 credit hours required for a Bachelor of Arts degree with a **communications major** include Communications 109, 115, 125, 205 (repeated for four semesters), 210, 215, 225, 235, 248, 485; Computer Science 120 or 121 (Computer Science 121 is required before further computer science courses can be taken); one English Professional Writing Course at or above the 200 level; and 15 credit hours in a concentration.

Graduates will be prepared as communications generalists. However, required additional courses in an area of concentration will permit students to focus their general preparation into a specific area of career interest. The Department offers **three concentrations**.

Prior to preregistration for the junior year, students must have elected a communications concentration each of which requires 15 credit hours.

The Corporate Media concentration educates a student to design, produce, and manage a variety of internal/external communications functions for business, industry, and other institutions. It requires a choice of two courses from the Business Department: 215, 265, or 312. Also required is one upper division communications elective and two approved electives to be chosen from one or two of the following departments: Business, Computer Science, English, Political Science, and Psychology.

The concentration in Public Relations permits a graduate to apply his learning in areas of human relations, advertising, interpersonal communications, and corporate communications. The concentration requires either Communications 301 or 304, either Business 369 or Psychology 414, Communications 401, and two approved electives to be chosen from one or two of the following departments: Business, Computer Science, English, Political Science, and Psychology.

The Mass Communication concentration, in addition to basic preparation in communications, develops competencies in areas of broadcasting and journalism. Required are Communications 311, 314, one upper division Communications elective, and two approved electives to be chosen from one or two of the following departments: Business, Computer Science, English, Political Science, and Psychology.

A major is permitted to count no more than 57 credits in communications toward graduation requirements.

ADMISSION REQUIREMENTS FOR COMMUNICATIONS MAJORS

All students accepted into the communications major must demonstrate competency in writing, speaking, and keyboarding. Writing competencies are determined by the Department of English. Students performing below an acceptable level are placed in writing courses designed to improve skills. Students unable to demonstrate at least *B* level work in a high school course limited only to

speech-related activities are placed by the Department in Communications 105 during the first week of class. Individuals who have not earned a C or better in a high school or equivalent typing course are placed by the Department in an elementary typing, keyboarding, or word processing course. Successful completion of these courses in all three areas are required for a student to continue in the program.

INTERNSHIPS AND PRACTICUMS

Out-of-classroom, on-the-job field experiences are encouraged of all students. A valuable experience linking the academic world and the work world, an internship or practicum can enable an advanced student to apply, in a practical way, his understandings and abilities in a career-related position.

Practicums often occur during the junior year and are available for no more than three semester credits. Internships are available only to seniors and may be taken only for twelve semester credits (requiring the internship to be the equivalent of a full-time position for a complete semester). Additionally, the internship option requires an overall 2.75 GPA and a 3.0 GPA in the major.

The Department's "Guide to the Preparation of Internships" serves as an outline of procedures and requirements for an internship. Students are permitted to seek their own positions for either option or to select one from nearly 100 opportunities already negotiated with regional communications organizations.

It is suggested that students electing these options consider the purchase of temporary professional liability/casualty insurance. The College assumes no liability for the student during the course of his/her performance of duties for an off-campus sponsoring organization.

RELATED EXPENSES

Additional expenses for the communications student normally include production materials for audio, video, and graphics courses. These expenses are part of the following courses: Communications 125, 215, 225, 235, 321, and 336.

105 Basic Speech

3 credits. Basic instruction in developing poise and confidence in speaking. Emphasis is placed on verbal and nonverbal communication, research, outlining, speech preparation, use of visual aids, and the rudiments of group dynamics and discussion.

109 Human Communication

3 credits. This course examines the physiological and psychological aspects of speech production, including an analysis of acceptable standards of voice, articulation, and pronunciation. Theory and development of skills relating to nonverbal communication, discussion and group

dynamics, and logical reasoning, as it relates to argumentation and debate, will also be included. *Prerequisite: Communication 105 or speech competency.*

115 History and Theory of Communication

3 credits. The course will examine communication theory—its history, scope, application, and research methods employed. Significant individuals and events in the history and development of the field of mass communication will be studied, as well as various mediums of communication.

125 Basic Production

3 credits. The course provides the design, theory, and development of production skills in a variety of audio visual materials, photography, and entry-level graphics. Students are required to participate in labs dealing with the operation and utilization of production equipment and the actual production of materials. A 35mm single lens reflex camera and electronic flash are necessary to complete the required projects. Students are required to purchase various production materials for the course.

205 Applied Communications

No credit. Four semesters of participation in approved cocurricular activities are required of all majors. All participation must meet standards of each activity in order to count in meeting the requirement. One semester must be in either *The Etownian* or *Conestogan*; the remaining three semesters must be in at least two different approved activities. Communication minors are required to have two semesters of participation in any activity or activities. Enrollment open only to communications majors or minors.

210 The Oral Communicator

3 credits. Students become proficient at translating the written word into an oral performance. Exercises and projects develop competence in a variety of areas appropriate to any of the communications concentrations that may be chosen by a major. *Prerequisite: Communications 105 or 109.*

215 Layout and Graphics

3 credits. The course employs the principles of design, typography, and assorted methods of production to provide a foundation in the preparation of posters, newsletters, magazines, special interest publications, and slide graphics. Elements of computer graphics are included. Students are required to purchase various production materials for the course. *Prerequisites: Communications 125 and Computer Science 120 or 121. (Prerequisites for Professional Writing students: English 185 and one Professional Writing course at or above the 200 level.)*

225 Audio Production

3 credits. A basic course in the form and methods of elementary audio production. In addition to theory and the development of basic skills, a student becomes knowledgeable in basic script writing. Students are required to purchase various production materials for the course. *Prerequisite: Communications 125.*

235 Video Production

3 credits. Designed to give a student the opportunity to learn about and utilize video production equipment. The course covers cameras, recorders, lighting, audio, switching, editing, and graphic techniques. Basic script writing and production planning skills will be developed. Students are required to purchase various production materials. *Prerequisites: Communications 125 and 225.*

248 Communication Law and Issues

3 credits. An examination of communication law and relevant issues within the field of communications. The course will include the history and effects of law, as well as past and current issues affecting the media. Students will explore relevant case studies and evaluate their impact and possible future trends. *Prerequisite: Communications 115 or permission of instructor.*

301 Interpersonal Communication

3 credits. A study of the theory and application of interpersonal relationships on the personal, education, and organizational levels. *Prerequisite: Communications 105 or 109 or permission of instructor.* Fall semester.

304 Persuasion

3 credits. An exploration of the theory and techniques of persuasion from the perspective of the persuader and of his audience. Topics include the ethics, social responsibility, and motivation of persuasion; the techniques of nonverbal communication and mass appeals. *Prerequisite: Communications 105 or 109 or permission of instructor.* Spring semester.

311 Reporting and Newswriting for the Media

3 credits. An introductory study of news media and values with emphasis on effective reporting and clear writing against deadlines. The course stresses accuracy, fairness, and logic in preparing stories under conditions similar to those encountered by professional journalists. *Prerequisites: English Professional Writing Course at the 200 level or above, or permission of instructor.* Fall semester.

314 Feature Writing for the Media

3 credits. The course concentrates on skills needed to free-lance articles or presentations on any topic to a wide range of media. Among types of writing covered are human interest, personality sketch, humor, how-to, background and informational pieces. Story titles, openings, closings, structure, use of anecdotes, and statistics are examined. *Prerequisites: Communications 311 or permission of instructor. (Professional Writing students: two Professional Writing courses and permission of the instructor.)* Spring semester.

321 Advanced Audio Production

3 credits. An advanced examination of writing and producing audio materials for radio broadcasting. In-depth analysis of the medium includes commercials, news, documentaries, and special programs. Students are required to purchase various production materials for the course. *Prerequisites: Communications 125, 225, and 235.* Fall semester.

336 Advanced Video Production

3 credits. A course which will develop the ability to produce programs, commercials, newscasts, and other broadcast and nonbroadcast productions. Students will produce a number of class projects applying video techniques to the fields of broadcast television, cable, corporate/educational/medical productions, production houses, and other nonbroadcast uses. Students are required to purchase various production materials for the course. *Prerequisites: Communications 125, 225, and 235.* Spring semester.

370-379 Special Problems

Variable credit. Periodic offering of the Department or directed study in topics of special interest to advanced majors.

401 Public Relations

3 credits. A study of the theory and practice of public relations, its role in administration, its role in society, and its potential as a career. *Prerequisite: English Professional Writing Course or permission of instructor.* Fall semester.

411 Telecommunications

3 credits. A study of recent technical developments in the field of communication and their potential sociocultural impact and resulting problems/advances related to utilization of the new systems. *Prerequisites: Communications 125, 225, and 235, or permission of instructor.* Fall semester.

470-479 Practicum and Internship

Variable credit. Instruction on an individual basis for credit from the communications faculty or other qualified professional in the student's chosen communications concentration: Corporate Media, Public Relations, Mass Communication. Communications minors may only elect the practicum for a maximum of three credits. *Prerequisites:* junior (practicum) or senior (internship) standing, scholarship requirement, and permission of instructor.

480-489 Independent Study

Variable credit. A specially designed course, unique to each student, which allows him the opportunity to pursue scholarly and practical work in the area of major interest under the guidance of members of the communications faculty. Specific goals and objectives of this course will permit the student to complete special projects, literature reviews, and research papers. *Prerequisites:* junior standing, scholarship requirement, permission of instructor, and permission of Independent Study Committee.

485 Communications Seminar

3 credits. A final course required of all majors. It is an integration of the theory and skills developed in preceding courses. As an individualized learning experience, the course provides opportunities for research, experimentation, project development, analysis, and practice of methods for each major's area of concentration. *Prerequisite:* senior standing.

THEATRE**255 Stagecraft/Lighting**

3 credits. (Core) The technique and theory of staging and lighting theatre productions. Topics include set design and construction; and planning and executing lighting effects.

265 Basic Acting

3 credits. (Core) An examination of the art and craft of the stage actor. Skills are developed in voice, acting style, and theory. Students are required to participate in a number of class projects involving the memorization of parts.

**DEPARTMENT OF
COMPUTER SCIENCE**

Associate Professors Leap, Zugarek (*Chair*)
Assistant Professors Cannon, Tulley

Bachelor of Science

The advent of high-speed machines with enormous capacity for the gathering, processing, storage, retrieval, and communication of information has affected nearly every aspect of our professions and our daily lives. Courses in computer science encourage the exploration and understanding of this social and technological phenomenon at several levels. Survey courses are provided for those who wish to understand in broad social contexts the nature of the computer and its effect on our lives and on society. Programming and language courses are provided for those who need to become skillful users of the computer. Advanced study in theory, hardware, software, and applications is provided for those who want to use the computer effectively and knowledgeably in another discipline. Advanced courses are designed to relate closely to the curricula in business, the natural and social sciences, engineering, and mathematics, and students are encouraged to develop simultaneous strengths in computing and in a discipline in which the computer is used as a tool.

The department offers *two majors*, one in *computer science*, the other in *computer science/business information systems*. Both provide a strong curriculum from which either a professional career may be launched, or a graduate program pursued.

The Department also offers a *minor* to enable majors in other disciplines obtain recognition for their efforts in pursuing knowledge in the area of computer science. Due to the varied interests of people who minor in computer science, Department faculty will help tailor the elective course selection to meet individual needs.

The College's main computing facility is housed in Nicarry Hall and consists of two Digital Equipment Corporation computer systems. The first, a VAX 11/750, is used primarily for administrative purposes. The second, a large VAX 11/780, is dedicated to academic use. This computer has 4 megabytes of main memory, 456 megabytes of on-line disk storage, a magnetic tape drive, a

floppy disk drive, a high-speed line printer, two remote line printers located in student terminal sites and a Calcomp model 1012 plotter. There are 96 terminal ports on the VAX 11/780 and over 50 terminals in student terminal rooms. A large number of these terminals are available 24 hours a day, 7 days a week. Additional terminals are located in laboratories and classrooms. A number of the terminals have graphics capability.

The College also has a variety of micro and personal computers available. These include Apple, IBM, and DEC personal computers. All of these computers are networked with the VAX computer, providing an integrated computing environment.

Major software systems available on the computers include most major computer languages (BASIC, Pascal, COBOL, FORTRAN, Modula and assembly language); many specialized languages and packages (SPSS, Minitab, GASP, Pilot and PLOT-10); both a CODASYL network type and a relational data base management system; and a screen forms management system. The College has several word processing packages in use, including one written by Computer Science Department faculty and students which is used by other major colleges.

All computer science majors and students enrolled in courses requiring use of the computer are assigned individual computer accounts and are given ample on-line storage space.

All computer science and computer science/business information systems majors are required to take a minimum of 39 hours in computer science courses including Computer Science 121, 122, 221, 222, 332, 341, and 490.

The computer science major is further required to take Computer Science 321, 322, and either 421 or 422, plus nine credits of computer science electives; Mathematics 121, 122, 151, 201, and one course chosen from 172, 222, 252; and an area elective which consists of four courses in one area other than computer science. Area elective courses may not be chosen from among those required for or elected to meet Core or international studies requirements and must be approved by the computer science faculty advisor.

The computer science/business information systems major is further required to take Computer Science 135, 335, 409, and nine credits of computer science electives; Mathematics 117, 151, and 172; Accounting 107, 108; Business Administration 215, 265, 325; and Economics 101, 102.

The computer science minor is required to take Computer Science 121, 122, 221, 222, and three additional computer science courses approved by the computer science faculty.

115 Introduction to Scientific Computing

1–3 credits. An introduction to the use of computers for scientific applications. Topics include algorithmic problem-solving techniques, syntax of the FORTRAN language, data representation, file handling, and the use of subprograms. (Students who have passed Computer Science 121 will receive one credit for this course. Students who have passed Computer Science 120 will receive two credits for this course. This course will not count towards a computer science major or minor.)

120 Introduction to Computer Processing

2 or 3 credits. An overview of computer concepts, uses, and issues. Software packages and computer applications will be a major component of this course, although elementary programming techniques will be taught using a suitable high-level programming language. (Students who have passed Computer Science 115 or 121 will receive two credits for this course. This course will not count towards a computer science major or minor.)

121 Computer Science I

1–3 credits. A course covering the introductory concepts of computer organization, data representation, algorithmic development and structured programming. Operating systems and I/O devices will be covered as they relate to the user. The student is expected to master the fundamentals of a high-level programming language. *Prerequisites:* high school algebra and trigonometry. (Students who have successfully completed Computer Science 120 will receive two credits for this course. Students who have successfully completed Computer Science 115 will receive one credit for the course.)

122 Computer Science II

3 credits. A continuation of 121 with emphasis on algorithmic analysis, recursion, internal sort/search methods and simple data structures. This course will introduce file processing and the study of programming language specification and analysis. Good programming style, expression, and documentation will be emphasized. *Prerequisite:* Computer Science 121.

135 Introduction to Business Computing

3 credits. An introduction to the application of the computer in a business environment. Topics include the structure of data, sequential file pro-

cessing, table organization and processing, design and debugging techniques using COBOL. *Prerequisite: Computer Science 121.*

221 Algorithms and Data Structures

3 credits. Methods for structuring data and the algorithms for handling them are developed. Topics include data types, aggregates, stacks, queues, linked lists, trees, string processing, sorting and searching, and data management. *Prerequisite: Computer Science 122.* Fall semester.

222 Assembly Language Programming

3 credits. Introduction to programming at the machine and assembly level including the relation to computer organization and the operating system interface. Topics include absolute and relocatable coding, program segmentation and code sharing, program linkage and loading, assembler operation, and macros. *Prerequisite: Computer Science 221.* Spring semester.

321 Discrete Structures (Mathematics 231)

3 credits. Topics in discrete mathematics as they apply to computer science including sets, relations, graphs and trees, Boolean algebras, groups and fields. *Prerequisite: Mathematics 151.* Fall semester.

322 Formal Languages

3 credits. The theoretical and practical analysis of the syntax of programming languages. Topics include the concepts and terminology associated with grammars, graph searching, parsing by recursive descent, and the theory of error repair and recovery. *Prerequisites: Computer Science 221, 321.* Spring semester.

332 Computer Organization

3 credits. Introduction to Boolean algebra, logic circuit and design, and their use in computer architecture. Basic parts of computer systems are studied including storage, control, and input/output systems. *Prerequisite: Computer Science 222.* Fall semester.

333 Computer Systems Interfacing (Chemistry 333, Physics 333)

3 credits. Digital logic and integrated circuits to implement logic; architecture and machine language programming of mini-computers and microprocessors; design, testing, and construction of instrument-to-computer and computer-to-instrument interfaces; design and testing of supporting software.

335 Programming Business Applications

3 credits. An advanced study of the COBOL language and a study of the concepts and techniques of sorting and searching, report generation, file processing, and structuring data in files including random and ISAM files. Projects relating to programming in business will be assigned. *Prerequisite: Computer Science 135.*

340 Business Information Systems

3 credits. A study of information systems from the user's point of view intended to give the potential manager an appreciation for the information requirements of an organization as well as the manager's role in the design of such systems. Topics include information and systems theory; the relationship between management, systems, and information; systems design; and an investigation of information systems of the various functional areas within the organization. *Prerequisites: Computer Science 120 or 121; Business Administration 215, 265.* Spring semester.

341 Systems Analysis and Design

3 credits. Analysis and design of computer-based and manual systems, including a study of information requirements, design approaches, processing methods, and data management systems. *Prerequisites: Computer Science 121 and either 122 or 135.* Fall semester.

344 Systems Simulation

3 credits. Fundamentals of modeling, stochastic processes, statistical measures of validity, and queuing theory. Applications will be programmed in higher-level languages as well as a specialized simulation language. *Prerequisites: Computer Science 221; Mathematics 151; or permission of instructor.* Fall, alternate years.

361 Computer Graphics

3 credits. A course covering introductory concepts of computer graphics including hardware, software, data storage and man/machine interaction. The student will be expected to become conversant with computer graphics hardware and be able to create software to provide the interactive generation of graphical output. *Prerequisites: Computer Science 221 and either Mathematics 172 or Mathematics 201.* Fall semester.

370-379 Special Topics

3 credits. A course designed to allow students to explore topics and problems of current relevance in computer science. *Prerequisite: permission of instructor.*

409 Data Base and Information Systems

3 credits. A study of information systems design and data base management techniques. Topics include information retrieval theory, data base design, data models, maintenance, file security, data reliability, CODASYL recommendations on DBMS. *Prerequisites:* *Computer Science 221, 335.* Spring semester.

421 System Programming I

3 credits. Design and construction of system software such as text editors, compilers and assemblers. Topics include command and statement parsing techniques, symbol tables, code generation, code optimization. A project involving design and construction of a working systems program will be assigned. *Prerequisites:* *Computer Science 222, 322.* Fall semester.

422 System Programming II

3 credits. An examination of the principles and theories behind the design of operating systems as well as their practical implementation. Topics include executives and monitors, task handlers, scheduling algorithms, file handlers, theories of resource allocation and sharing, multiprocessing and interprocess communication. *Prerequisites:* *Computer Science 322, 332.* Spring, alternate years.

471 Internship in Computer Science

Variable credit. Work experience designed to supplement course work. By working for business, school, or government, the student gains valuable knowledge unavailable from textbooks. *Prerequisite:* *approval of computer science faculty.*

480-489 Independent Study

Variable credit. Designed to allow the student to do independent study and research on a problem or topic in the field of computer science. *Prerequisite:* *approval of computer science faculty and Dean of the Faculty.*

490-491 Readings and Projects in Computer Science

3 credits. A directed project or study requiring faculty acceptance of a proposal and a final report and defense of work. *Prerequisites:* *junior or senior status and permission of instructor.*

DEPARTMENT OF EDUCATION

Professors Rice, Ziegler (*Chair*)
Associate Professors Bowers, Callenbach,
Fox
Assistant Professor Benelli

Bachelor of Science

The Department offers three major certification programs—Early Childhood (N-3), Elementary (K-6), and Secondary (7-12)—which seek to combine a strong liberal arts education with the development of high professional competence. Complementing the General Education Core and, in secondary certification, the student's academic major, the certification programs bring together in a creative way the student, the school, and the subject to be taught. The Department further stresses the importance of supervised field experiences which complement on-campus courses in education.

Encompassing the education of the child from birth to eight years of age, the early childhood program prepares individuals to teach in nursery school, a day-care center, kindergarten, and grades 1-3 in both public and private schools.

ADMISSION TO TEACHER EDUCATION PROGRAM

All applicants who plan to teach must, by the time they have completed Education 235 or 305, file a written application for admission to the Teacher Education Program and meet the qualifying criteria of the Department of Education: proficiency in English and speech, good physical and mental health, a grade point average of at least 2.0, approval of the Office of Student Affairs, satisfactory evaluation and recommendation by the members of the Department of Education, approval by the major department of prospective secondary school majors, and satisfactory results on the Educational Testing Service National Teacher Exam (ETS/NTE) Core Battery Tests of Communication Skills and General Knowledge. Seniors will take the test of Professional Knowledge (effective class of 1986).

Note: Students who fail to meet these criteria as applicants, or who later fail to maintain satisfactory progress, are counseled out of the program and directed into other areas of endeavor.

EARTH SCIENCE

*See Department of Physics and Earth
Science, page 87.*

PROGRESS TOWARD PROGRAM COMPLETION

1. Students are evaluated at the conclusion of each semester after admission into the program, and may be advised to withdraw at any time the Department determines that withdrawal is in the best interests of the College, the program, and the student.
2. Any grade below C in the teaching major after completion of the 100-level courses will disqualify a student from certification.
3. Students should apply for certification during the semester in which they will graduate. Should they apply after they have graduated, they must satisfactorily complete whatever additional requirements are then in effect before they can receive certification.

CERTIFICATION PROGRAM REQUIREMENTS

The Secondary Certification Program (accompanied by the bachelor of arts or bachelor of science degree, depending on the student's academic major):

- A. General Education Core as detailed by the College.
- B. Academic major as outlined by each program area which supports a certification program: biology, chemistry, physics, general science, or social studies.
- C. Professional education requirements: Education 305, 225d, 415, 225e, 473.
- D. ETS/NTE Test of Professional Knowledge (effective with the Class of 1986).

The Elementary Education Major (bachelor of science degree):

- A. General Education Core as detailed by the College. Psychology 105 must be taken as part of the social science Core requirement.
- B. Professional education requirements: Education 205, 225a-c, 235, 325, 335, 355, 365, 472, 490-498 (6 credits); Mathematics 211, 212; Psychology 225; Physical Education 285; Music 325, 326.
- C. Electives

The Early Childhood Education Major (bachelor of science degree):

- A. General Education Core as detailed by the College. Psychology 105 must be selected as part of the social science Core requirement.
- B. Professional education requirements: Education 205, 225a-c, 235, 315, 320, 325, 335, 355, 365, 471, 490-498 (6 credits); Mathematics 211, 212; Psychology 225; Physical Education 285; Music 325, 326.
- C. Electives

205 Foundations of Education

4 credits. A study of some of the historical, philosophical, sociological, and psychological foundations of education. *Prerequisite: Psychology 105.*

Note: Admission to the Teacher Education Program is a prerequisite to any other education course.

225 a-e Education Practicum

Variable credit. Provides instruction in media and experience in the preschool, elementary, or secondary classroom. The practicum and its co-requisite courses integrate classroom experience with on-campus study.

235 Fundamentals of Reading Instruction

3 credits. An introduction to the systematic assessment and teaching of the basic reading skills: word recognition, word analysis, and comprehension skills. *Prerequisite: Education 205; corequisite: Education 225b.*

305 Practicum in Secondary Education

4 credits. The instructional methodology of an academic discipline is integrated with in-school experience under the guidance of a clinical professor in the academic major: biology, chemistry, physics, general science, or social studies. *Prerequisite: Psychology 105; corequisite: Education 225d.*

310 History of Science

1 credit. A study of developments in science from the ancient Greeks to the twentieth century. *Prerequisite: permission of instructor.*

315 Early Childhood Education

4 credits. A study of programs from preschool through grade three, emphasizing the setting, the child, and the special needs and approaches of early childhood education. On-campus study is coordinated with the experiences of observing and participating in early childhood settings. *Prerequisites: Education 235, Psychology 225.* Fall semester.

320 Special Methods in Early Childhood Education

4 credits. Integrates early childhood materials and methods into the framework of the preoperational child. *Prerequisite: Education 315; co-requisites: Education 325, 335, 355, 365.* Spring semester.

325 Science for Early Childhood/Science for Elementary Education

3 and 4 credits, respectively. A study of science concepts, procedures, and materials for the preschool and elementary child. *Prerequisite: Education 315 (early childhood); 235 (elementary); corequisite: Education 225C.*

335 Mathematics for Early Childhood/Mathematics for Elementary Education

3 and 4 credits, respectively. A study of mathematics concepts, procedures, and materials for the preschool and elementary child. *Prerequisite: Education 315 (early childhood); 235 (elementary); corequisite: Education 225C.*

355 Language Arts and Reading for Early Childhood/Language Arts and Reading for Elementary Education

3 and 4 credits, respectively. A study of concepts, procedures, and materials in language arts and reading for the preschool and elementary child. *Prerequisite: Education 315 (early childhood); 235 (elementary); corequisite: Education 225C.*

365 Social Studies for Early Childhood/Social Studies for Elementary Education

3 and 4 credits, respectively. A study of social studies concepts, procedures, and materials for the preschool and elementary child. *Prerequisite: Education 315 (early childhood); 235 (elementary); corequisite: Education 225C.*

371-380 Special Problems in Education

Variable credit. Topics chosen in response to student and faculty interests. *Prerequisite: permission of instructor.*

415 Topics in Secondary Education

4 credits. Theory and practice of secondary education. Includes study of human development, interrelationships of individuals and groups, and other topics selected in response to standards for certification and other needs of the prospective secondary education teacher. *Prerequisite: Education 305; corequisite: Education 225e.*

471 Professional Internship, Early Childhood

16 credits. Student teaching in an early childhood classroom. *Prerequisites: Education 320, 325, 335, 355, 365.*

472 Professional Internship, Elementary Education

16 credits. Student teaching in an elementary classroom. *Prerequisites: Education 325, 335, 355, 365.*

473 Professional Internship, Secondary

12 credits. Student teaching in a secondary classroom. *Prerequisite: Education 305; corequisite: Education 415.*

480-489 Independent Study

Variable credit. Upon the initiative of the student, a program of study may be organized with a faculty member on a topic of mutual interest.

490-498 Special Topics

Variable credit. Courses designed to give students opportunity to pursue work in an area of major interest in such topics as art in the elementary school, creativity, computers in education, children's literature, developmental reading.

DEPARTMENT OF ENGLISH

Professors Campbell, Dwyer
 Associate Professors Black, Russell (*Chair*),
 Sarracino
 Assistant Professors Hala, Harris, Huber,
 Rohrkemper

Bachelor of Arts

The Department of English offers an education which stresses both the knowledge and effective use of language and an understanding and appreciation of our literary heritage. Excellence in both writing and literary studies is the fundamental aim of the General Education courses and of the rigorous and comprehensive concentrations which prepare students for graduate training in English or professions such as law and medicine, for professional writing careers in a variety of fields, or for teaching at the secondary level of education.

The English major requires 42 hours including the 6 hours specified as literature area Core.

The literature concentration requires English 105, 301, 363, 394; one course in literary forms (all English courses with middle digit 1); three courses in literary movements (all English courses with middle digit 2); one course in individual authors (all English courses with middle digit 3); two courses in American literature (all English courses with middle digit 4); and an additional 9 hours of electives in English (excluding English 101 and 102).

The professional writing concentration requires English 105, 185, 301, 393; Communications 215; one English course with middle digit 1; two English courses with middle digit 2; one English course with middle digit 3; one English course with middle digit 4; and 12 hours in writing electives to be selected from English and Communication writing courses: English courses with middle digit 8 (no more than two courses from English 285A/B/C/D) and Communications 311, 314 (no more than one course and not necessarily either).

The secondary education concentration requires English 102, 105, 185, 301, 306; one English course with middle digit 1; one English course with middle digit 2; one English course with middle digit 3; two English courses with middle digit 4; one English course from 381, 382, 383; an additional 9 hours of electives in English (excluding English 101); Psychology 105; and Education 305, 225d, 415, 225e, 473.

The Department of English offers a *minor* consisting of 24 hours (including 6 in literature from the Core) and distributed as follows: English 105, 185;

one course with the middle digit 1, one course with the middle digit 2, one course with the middle digit 3, and one course with the middle digit 4; and two courses from the remainder of the Department's offerings (excluding English 101, 102, 306). Students must apply for acceptance to the minor no later than the beginning of their junior year (at the completion of 60 credits).

101 Basic English (Developmental Studies 101)

3 credits. A course introducing students to various forms of academic prose, with an emphasis on developing students' fluency and voice in writing. No credit granted if taken after successful completion of English 102.

102 Expository Writing

3 credits. A course allowing students to experience writing as a dynamic, complex process involving recursive stages of probing a subject, generating ideas, planning, redrafting, and editing.

105 Introduction to Literature

3 credits. (Core) A study of the different genres of literature, intended to develop the ability to analyze, evaluate, and appreciate literature, and to provide the necessary background for upper-level literature courses. Readings are drawn from major authors such as Homer and Shakespeare. Prerequisite to all literature courses. *Prerequisite: English 102 or exemption from it.*

185 Introduction to Professional Writing

3 credits. An introduction to the varieties of discourse and research in many professional areas and including instruction in basic terminology and photographic techniques.

285A/B/C/D Writing in the Professions

3 credits each. A study of the range of materials typically produced in specific professional areas so that students gain a sense of the constraints that govern their style:

- 285A Writing for Science and Technology
- 285B Writing in the Health Professions
- 285C Writing in the Social Sciences
- 285D Writing for Government and the Judicial Systems

301 History of the English Language

3 credits. A combination of a history of language and an introduction to linguistics related to literature, stylistics, and composing.

306 Methods Seminar in Teaching Language and Composition

3 credits. The teaching of English grammar and usage, with reference to teaching composition at the secondary school level, practical application of various methodologies through tutoring in-ternships in the Writing Center. Prerequisite to professional semester. Spring semester.

312 English Drama Before 1900

3 credits. (Core) A study of representative English plays, excluding Shakespeare, from the Middle Ages to the twentieth century, emphasizing Elizabethan and Jacobean drama. *Prerequisite: English 105.* Fall, alternate years.

313 Modern Drama

3 credits. (Core) A study of drama from the realism of Ibsen through naturalism, expressionism, and symbolism to the current avant garde theatre. *Prerequisite: English 105.* Spring semester.

314 The English Novel Before 1900

3 credits. (Core) A study of selected masterpieces from Defoe to Hardy as works of prose art and as turning points in the development of the form. *Prerequisite: English 105.* Fall, alternate years.

317 Modern Novel

3 credits. (Core) A study of the work of major novelists of the twentieth century with emphasis upon the development of the novel as an art form. *Prerequisite: English 105.* Fall semester.

318 Modern Poetry

3 credits. (Core) A study of at least three major twentieth-century poets as well as selections from writers who have published within the last thirty years. *Prerequisite: English 105.* Spring semester.

320 Concepts of the Renaissance

3 credits. (Core) A study of the "ruling ideas" of the Renaissance in Britain; representative nondramatic writers with an emphasis on Spenser. *Prerequisite: English 105.* Spring, alternate years.

322 The Seventeenth Century

3 credits. (Core) A study of the major non-dramatic writers, excluding Milton, from 1600 to 1660: among them, Donne, Jonson, Herbert, and selected prose writers. *Prerequisite: English 105.* Fall, alternate years.

323 The Restoration and Eighteenth Century

3 credits. (Core) A study of poetry and prose from 1660 to 1800 with an emphasis on Dryden, Swift, Pope, Sterne, and Johnson. *Prerequisite: English 105.* Fall, alternate years.

327 The Romantic Movement

3 credits. (Core) A study of selected poetry and prose most significantly embodying the central concepts and achievements of English Romanticism. *Prerequisite: English 105.* Fall, alternate years.

328 The Victorian Period

3 credits. (Core) A study of selected poetry and prose from Tennyson to Hardy particularly emphasizing the changing responses of the artist to the conflicts stemming from the industrialization of the period. *Prerequisite: English 105.* Spring, alternate years.

329 Modern British Literature

3 credits. (Core) A study of poetry and prose from the end of the nineteenth century to the middle of the twentieth with an emphasis on the development of a modern aesthetic in the works of such writers as Housman, Conrad, Yeats, Lawrence, Woolf, and Auden. *Prerequisite: English 105.* Fall, alternate years.

331 Chaucer

3 credits. (Core) A study of representative works of Chaucer. *Prerequisite: English 105.* Fall, alternate years.

332 Shakespeare

3 credits. (Core) A study of representative works of Shakespeare. *Prerequisite: English 105.* Spring semester.

333 Milton

3 credits. (Core) A study of representative works of Milton. *Prerequisite: English 105.* Spring, alternate years.

337 Eighteenth-Century English Authors

3 credits. (Core) A study of representative works of one or two major authors such as Pope, Swift, Fielding, and Goldsmith. *Prerequisite: English 105.* Fall, alternate years.

338 Nineteenth-Century English Authors

3 credits. (Core) A study of representative works of one or two major authors such as Blake, Keats, Dickens, and Hardy. *Prerequisite: English 105.* Fall, alternate years.

340 The American Romantic Movement

3 credits. (Core) A study of American Transcendentalism, including its sources, and of major figures of the period such as Hawthorne, Melville, Whitman, Emerson, and Thoreau. *Prerequisite: English 105.* Fall, alternate years.

341 The Rise of Realism in American Literature

3 credits. (Core) A study of American literature in the late nineteenth and early twentieth centuries with emphasis on such writers as Dickinson, Clemens, Robinson, Frost, Dreiser, and Fitzgerald. *Prerequisite: English 105.* Spring, alternate years.

342 Experimentalism in American Literature

3 credits. (Core) A survey of major American writers of the last fifty years, authors such as Pound, Eliot, Faulkner, Williams, Stevens, Jeffers, Moore, and Nabokov. *Prerequisite: English 105.* Fall, alternate years.

343 American Authors

3 credits. (Core) A study of the writings of one or two American authors such as Melville, James, Whitman, and Faulkner. Satisfies American literature rather than major-author requirement for English majors. *Prerequisite: English 105.* Spring, alternate years.

351 Analysis of Poems

3 credits. (Core) Intensive training in reading the individual poem accurately and sensitively. *Prerequisite: English 105.* Fall, alternate years.

352 Fantasy in Literature

3 credits. (Core) A study of major works of fantasy (*Alice in Wonderland*, *The Hobbit*, *The Golden Key*, and others) focusing on the thematic significance of "the journey." *Prerequisite: English 105.* Spring, alternate years.

357 Women and Literature

3 credits. (Core) A study of the effects on women writers and readers of a male dominated literary tradition. *Prerequisite: English 105.* Fall, alternate years.

363 Literary History of Great Britain

3 credits. A course complementing the period-course requirement for literature-concentration students and conveying the relationships of historical literary movements. *Prerequisite: three period courses in English literature.* Spring, alternate years.

370-379 Special Problems

3 credits. Courses involving specific subjects chosen in response to student/faculty interest. *Prerequisite: English 105.*

381 Creative Writing (Poetry, Prose)

3 credits. A course for the writing of original poetry or prose, or both, and developing an understanding of the craftsmanship involved. Graded pass/no pass. *Prerequisite: permission of instructor.* Fall semester.

382 Technical Writing

3 credits. A course emphasizing clarity and precision in writing and including instruction in oral and graphic presentations of technical information.

383 Munugerial Communications

3 credits. A course emphasizing the concerns of administrative writers and including instruction in oral and graphic communication of business information. *Prerequisite: permission of instructor.* Spring semester.

384 Advanced Composition and Editing

3 credits. A laboratory/lecture course instructing students in advanced writing and involving them in service in a Writing Center as responsive readers of other students' prose. *Prerequisite: English 185.* Spring semester.

393 Senior Writing Seminar

3 credits. A consideration of a variety of topics: history of rhetoric, linguistics, and modern heuristics in teaching writing. *Prerequisite: Professional Writing Concentration or permission of instructor.* Fall semester.

394 English Seminar

3 credits. A seminar for English majors on the history of literary criticism including research techniques and a research project. Required for majors. *Prerequisites: English 105; permission of instructor for nonmajors.* Spring, alternate years.

470-479 Internships

1-3 credits. One- or two-credit internships may be requested in either a student's junior or senior year in an on- or near-campus assignment. Three-credit internships are for students proven competent in one- or two-credit internships or judged as having special aptitudes for the specific internship. See the Department Chair for information.

480-489 Independent Studies in English

2-3 credits. A course designed to give the individual student the opportunity to pursue work in an area of major interest under the guidance of a member of the Department of English. See the Department Chair for registration instructions.

Education 305 Practicum in Secondary Education: English

4 credits. The exploration and application of various teaching styles and strategies in the teaching of literature in the secondary-school English classroom; in-school observations and internships as paraprofessional experience. *Prerequisite: Psychology 105; corequisite: Education 225d.*

FRENCH

See Department of Modern Languages, page 74.

GERMAN

See Department of Modern Languages, page 74.

HEALTH CARE

See Department of Business, page 53.

DEPARTMENT OF HISTORY

Professors Kreider (*Chair*), Mumford,
Vassady, Winpenny
Associate Professor Poole

Bachelor of Arts

History, the inquiry into the deeds and thoughts of man's past, is a valuable and enjoyable basis for a liberal education. The student of history invariably acquires, through this vicarious experience, a better perspective which can lead to sound judgment and wise decisions. Furthermore, an understanding of the repetitive and complex nature of man's perennial problems produces in the student a healthy sophistication and a steady self-confidence which help to dissolve the uncertainties of modern life.

The Department's program is designed to prepare students for further study in graduate programs in history, theology, government, law, museum studies, and library science; or for careers in teaching, government service, and business.

The *history major* requires a student satisfactorily complete 39 hours of course work in history: History 105 (or its equivalent) and 390; nine hours in United States history; nine hours in European history; six hours in non-United States, non-European courses; and nine hours in history electives.

History is one of the major areas in the social studies major which prepares a student for certification to teach in secondary schools. Students with interest in this area should consult the detailed descriptions in the interdisciplinary section of this catalog, page 105.

It is possible for the student to acquire a Bachelor of Arts in History as a history major and receive certification in the social studies. For further explanation, contact a member of the History Department.

Combinations which allow the student a major and training for other careers are possible. For example, one may major in history and also take a recommended program of courses in business. Consult the Department for other options in combination with communications, political science, or other program areas.

For a *minor in history*, the student shall successfully complete 21 hours of course work, composed of the following courses: History 105, 201, 202, 390, one other course in United States history, one other course in European history, and one course in non-United States, non-European history. Students with specific career or personal interests are encouraged to consult with the Department Chair.

105 Topics in the History of Western Civilization

3 credits. (Core) A highly selective approach to the long-range developments and to the major problems of our Western heritage.

201 History of the United States to 1877

3 credits. (Core) A narrative account and analysis of the social, political, economic, and diplomatic forces that have shaped the American experience from the earliest colonial settlements through the end of post-Civil War Reconstruction—roughly 1877.

202 History of the United States since 1877

3 credits. (Core) A narrative account and analysis of the social, political, economic, and diplomatic forces that have shaped the American experience from the beginning of Reconstruction—roughly 1865—through the resignation of Richard Nixon.

205 Modern Far East

3 credits. (Core) A general survey of China, Japan, Korea, and Southeast Asia from about 1800 to the present, with special emphasis on East-West relations.

215 English History to 1603

3 credits. (Core) Medieval England from the Anglo-Saxons to Queen Elizabeth I with emphasis on the constitutional and legal foundations, and the role of the Church.

216 English History since 1603

3 credits. (Core) Modern Britain since James I with emphasis on the evolution of the parliamentary form of government and Britain's role as a world power.

306 Recent History of the United States

3 credits. (Core) An intensive analysis of the vexing economic, political, social, and diplomatic forces responsible for shaping the American experience since 1900; conflicting interpretations emphasized.

313 History of Tsarist Russia

3 credits. (Core) The development of Russia from its medieval origins to the twentieth century with emphasis on the development of Tsarist institutions, society, and political development.

314 History of Soviet Russia

3 credits. (Core) A study of the Russian Revolution and the building of the new society with emphasis on the Soviet Union's position in the modern world.

315 Renaissance and Reformation

3 credits. (Core) The Civilization of the Renaissance in Italy with emphasis on Florence; Erasmus; and the Protestant Reformation of the sixteenth century.

316 The Age of Louis XIV

3 credits. (Core) Western Europe in the seventeenth century with emphasis on the ascendancy of France, the Dutch Republic, and Stuart England.

317 Revolution, Nationalism, and Democracy

3 credits. (Core) Nineteenth-century Europe from the Vienna Congress to World War I with particular emphasis on the conservative reaction to the French Revolution, the movement towards democracy, and the surge of nationalism.

318 The Age of Anxiety

3 credits. (Core) An examination of twentieth-century Europe, surveying both World Wars and their effect on modern society; emphasis on the rise of totalitarian ideologies, the plight of democracy, and the Depression.

323 History of China

3 credits. (Core) A survey of Chinese history and culture with emphasis on the modern period and the meeting of China and the West.

324 History of Japan

3 credits. (Core) A survey of Japanese history and culture from the beginning to modern times, including Japan's response to the Western impact.

327 History of Africa

3 credits. (Core) A survey of African history and culture using an interdisciplinary approach with emphasis on the history of the politics, cultures, arts, and societies of the African people.

328 Modern Africa

3 credits. (Core) Africa in the nineteenth and twentieth centuries with emphasis on the age of imperialism and colonialism, as well as on African nationalism leading to independence.

330–339 Studies in United States History

3 credits for each course. (Core) An analytical inquiry into special topics and periods: economic history, urban history, colonial America, the American Revolution, the Middle Period, the Age of Industrialism, technology and society, and so forth.

340–349 Minorities in United States History

3 credits for each course. (Core) An incisive view of minorities in a society venerating majoritarian rule: for example, Afro-American history, immigration and ethnicity, Southern history, Indian history, and women in history.

370–379 Special Problems

3 credits. (Core) Special subjects chosen as a response to student and faculty interest.

390 Historical Methods and Historiography

3 credits. (Core) The student will learn to do research in manuscript, primary, and secondary resources and will write a research paper. In addition, the course will examine interpretations and philosophies of history and recent approaches and techniques to research.

403 A History of United States Foreign Relations

3 credits. (Core) A study of the major personalities, events, and trends in United States foreign policy with an emphasis on the influence exerted by domestic considerations.

406 Social and Intellectual History of the United States

3 credits. (Core) An examination of the major social and intellectual movements in the United States from colonial times to the present with an emphasis on reform and reformers.

411 Greek and Roman History

3 credits. (Core) Athens in the classical age from Solon to Alexander; Rome during the Republic, the Augustan Age and the early Empire. By special arrangement.

412 Medieval History

3 credits. (Core) Western Europe from the decline of the Roman Empire to the fifteenth century with emphasis on the feudal system, the role of the Latin Church, and the rise of universities. By special arrangement.

480–489 Independent Study

Variable credit. (Core) Designed to offer an opportunity to use techniques of historical interpretation in specific problem areas. *Prerequisites: approval of the Dean of the Faculty; permission of instructor.*

498–499 History Seminar

3 credits. (Core) A special course designed primarily for (but not limited to) senior majors in the Department. Research is an integral part of the learning experience.

DEPARTMENT OF MATHEMATICS

Professors Blaisdell (*Chair*), Bossler,
D. Koontz, Shubert
Associate Professors R. Dolan,
J. Koontz, Morse

Bachelor of Science

The program in mathematics at Elizabethtown College is designed to prepare the mathematics major for graduate study, for secondary teaching, or for employment in industry and government. Service courses provide students in the physical, managerial, social, and life sciences with the mathematical tools essential for their respective fields. These courses also satisfy the General Education Core requirement and teach an awareness of the cultural significance of mathematics and its contribution to the modern world. Instruction is designed to promote the development of proficiency with deductive reasoning, the ability to mathematically model “real” world phenomena, problem solving strategies, and computational skills.

The Department offers four options. The *pure mathematics option* is designed to provide a firm foundation for successful graduate study in mathematics. The major objective is to promote the development of self-reliance, initiative, and confidence, i.e., mathematical maturity. The *secondary education option* is required for Secondary Education Certification. Students in this option are given a solid foundation in geometry, algebra, and statistics essential for effective teaching and analysis of the secondary school mathematics curriculum. The *applied mathematics option* provides a firm foundation in applied mathematics, enabling graduates to pursue careers in industry and government. Students electing this option usually develop additional strength in at least one area which uses mathematics extensively, such as the physical, social, life, or managerial sciences. Finally, a *computer science option* is available for the student who desires to be a highly skilled computer analyst with an unusually strong background in mathematics.

For the nonmathematics major the Department offers a choice of two minors: the *minor in statistics* and the *minor in mathematics*. Each is developed on a common foundation of twelve hours of calculus and three hours of

linear algebra. The *minor in statistics* is designed to provide training specifically in this field, while the *minor in mathematics* allows the student the flexibility of course selection. In addition to Mathematics 121, 122, 222, and 201, the minor requirements are as follows:

The *minor in statistics* requires Mathematics 151, 252, 351, and 352.

The *minor in mathematics* requires three courses above the level of Mathematics 212, at least one of which must be selected from Mathematics 301, 302, 421, 422, 441.

All mathematics majors are required to take a minimum of 36 hours in mathematics courses, including Mathematics 121, 122, 201, and 222, and at least two courses selected from 301, 302, 421, 422, and 441. Computer Science 121 is required and should be taken as early as possible. Each major is also required to complete Modern Language 112, or six hours of computer science courses in addition to Computer Science 121. Finally, at least one of the four options must be completed as follows:

The pure mathematics option requires Mathematics 302, 422, 441, and six hours from other 300- or 400-level mathematics courses.

The secondary education option (required for secondary education certification) requires Mathematics 301, 341, 351, 421, either 302 or 422, and six hours from other 300- or 400-level mathematics courses. In addition, Psychology 105; Education 305, 225d, 415, 225e, 473.

The applied mathematics option requires any five courses selected from Mathematics 321, 324, 351, 352, 361, 362.

The computer science option requires Mathematics 321, 324, 361, 362, and any other 300- or 400-level mathematics course; Computer Science 122, 221, 222, and six hours in any 200-, 300- or 400-level computer science courses. (These computer science courses will also fulfill the modern language or computer skills requirement.)

011 Intermediate Algebra (Developmental Studies 011)

2 credits. A study of the fundamental algebraic and computational skills used in certain science courses and prerequisite to Mathematics 101 and 117. Credits will not count toward the 128 required for graduation.

101 Precalculus Mathematics

4 credits. (Core) Precalculus study of the function concept and of particular classes of functions: polynomial, rational, algebraic, exponential, logarithmic, and trigonometric functions.

The main objective of this course is to prepare students for Mathematics 121. *Prerequisite: Mathematics 011 (competency).*

117 Concepts of Calculus

4 credits. (Core) Designed to give students in the biological, social, and management sciences a firm working knowledge of calculus. The approach is intuitive with emphasis on applications. Topics include differentiation, curve sketching, exponential functions, and integration. *Prerequisite: Mathematics 011 (competency).*

121 Calculus I

4 credits. (Core) A presentation of the basic concepts and techniques of the differential and integral calculus of elementary functions, including a study of limits and continuity. Applications are taken mostly from the physical sciences. *Prerequisite: Mathematics 101 (competency).*

122 Calculus II

4 credits. (Core) A continuation of 121, involving the calculus of the trigonometric, exponential, logarithmic, and rational functions. Analytic geometry is also included. *Prerequisite: Mathematics 121.*

151 Probability and Statistics

3 credits. (Core) A study of the basic principles of probability, frequency distributions, measures of location and dispersion, sample and population relationships, estimation, and hypothesis testing. The main objective of this course is to introduce students to statistical thinking and tools, and their relation to everyday life.

172 Finite Mathematics

3 credits. (Core) A study of various noncalculus topics, including set theory, logic, probability, matrices, linear programming, and Markov chains. Applications will be drawn from the biological and social sciences. *Prerequisite: Mathematics 151.*

201 Linear Algebra

3 credits. (Core) A presentation of the basic concepts and techniques of linear algebra, including vectors, vector spaces, matrices, determinants, systems of linear equations, and linear transformations. *Prerequisite: Mathematics 121.*

211 Concepts in Modern Mathematics I

3 credits. (Core) An introduction for liberal arts students and prospective elementary teachers to

some of the concepts and applications of modern mathematics. Includes such topics as sets and functions, logic, measurement, metric system, introduction to the computer, numeration systems, and number theory. Will meet Core requirements only for elementary and early childhood education majors.

212 Concepts in Modern Mathematics II

3 credits. (Core) A continuation of 211 for prospective elementary teachers. Topics include the structure of number systems, geometry, geometry of measurement, and an introduction to probability and statistics. Will meet Core requirements only for elementary and early childhood education majors. *Prerequisite: Mathematics 211 or permission of instructor.*

222 Calculus III

4 credits. (Core) A continuation of 122, completing the basic topics of the calculus sequence, including three-dimensional analytic geometry, series, calculus of functions of several variables, and an introduction to differential equations. *Prerequisite: Mathematics 122.*

231 Discrete Structures (Computer Science 321)

3 credits. Topics in discrete mathematics as they apply to computer science, including sets, relations, graphs, and trees, Boolean algebras, groups, and fields. *Prerequisite: Mathematics 151.* Fall semester.

252 Statistical Methods

3 credits. (Core) A continuation of material presented in 151. The course will emphasize statistical techniques useful in business, the social, physical, and life sciences. Topics include simple and multiple regression analysis, elements of experimental design, analysis of variance, and survey sampling. *Prerequisite: Mathematics 151.*

301 Abstract Algebra I

3 credits. (Core) An axiomatic study of a variety of algebraic structures and concepts including divisibility, congruences, modular arithmetic, number theory, sets, groups, and rings. Emphasis on the development of skill in proof construction and interpretation of abstract concepts. *Prerequisite: Mathematics 201.* Fall, alternate years.

302 Abstract Algebra II

3 credits. (Core) A continuation of 301. Emphasis will be given to rings, integral domains, fields, polynomials over integral domains and fields, vector spaces, and the development of the system of rational numbers. *Prerequisite: Mathematics 301.* Spring, alternate years.

321 Differential Equations

3 credits. (Core) A study of standard methods for solving ordinary differential equations and boundary value problems. Topics include n^{th} order linear differential equations, the Laplace transformation, and power series solutions. *Prerequisite: Mathematics 222.* Spring semester.

324 Mathematical Models and Applications

3 credits. (Core) Survey of a number of mathematical topics and a variety of models in the social and life sciences. Problems provide motivation for the development of tools and techniques employed throughout applied mathematics: axiomatics, probability theory, matrix algebra, simulation, and linear programming. *Prerequisites: Mathematics 201, 222.* Spring, alternate years.

341 Modern Geometry

3 credits. (Core) The concept of a geometry as a logical system based upon postulates and undefined elements, along with an appreciation of the historical evolution of geometries. Topics include incidence geometries, planes and space, congruence, inequalities, parallel postulates, parallel projections, similarities, circles, and additional theorems. Fall, alternate years.

351 Mathematical Statistics I

3 credits. (Core) A comprehensive development of the theory of statistics through a study of probability and distribution theory, including the uniform, geometric, binomial, hypergeometric, negative binomial, multinomial, Poisson, exponential, gamma, chi-square, Student's t , Snedecor's F , and normal distributions. *Prerequisite: Mathematics 222.* Fall, alternate years.

352 Mathematical Statistics II

3 credits. (Core) A continuation of 351. A study of principles of statistical inference with an emphasis on estimation and hypothesis testing. *Prerequisites: Mathematics 201, 351.* Spring, alternate years.

361 Numerical Methods in Matrix Algebra

3 credits. (Core) A study of selected topics in matrix algebra useful in advanced mathematical and statistical work involving multivariate analysis. Topics include several computer-oriented techniques applied to the inversion of matrices, determination of eigenvalues and eigenvectors, diagonalization of matrices, direct and iterative solution of systems of linear equations and iterative solutions of one or more nonlinear equations. *Prerequisites: Mathematics 201, 222, and Computer Science 121.* Fall, alternate years.

362 Numerical Analysis

3 credits. (Core) A study of iterative methods suitable for computer programming which are useful in solving a variety of mathematical problems arising in engineering and the sciences. Topics include curve fitting and function approximation, analysis of polynomial interpolation, numerical differentiation and integration, and numerical solutions of differential equations. *Prerequisite: Mathematics 361 or permission of instructor.* Spring, alternate years.

370–379 Special Topics in Mathematics

Variable Credit. (Core) Directed study in topics of special interest to advanced undergraduate mathematics students. *Prerequisite: permission of the Department of Mathematics Chair.*

421 Real Analysis I

3 credits. (Core) A rigorous study of the fundamental concepts of analysis, including such topics as sets and functions, sequences of real numbers, series of real numbers, limits and metric spaces, and continuity. *Prerequisites: Mathematics 201, 222.* Fall, alternate years.

422 Real Analysis II

3 credits. (Core) A continuation of 421, including such topics as integration, differentiation, Taylor series, sequences of functions, and series of functions. *Prerequisite: Mathematics 421.* Spring, alternate years.

441 Topology

3 credits. (Core) A study of point set topology, using the axiomatic method. Topics include sets, metric spaces, topologies, continuity, separation axioms, compactness, and connectedness. *Prerequisites: Mathematics 201, 222.* Spring, alternate years.

480–489 Independent Study

Variable credit. (Core)

Education 305 Practicum in Secondary Education: Mathematics

4 credits. *Prerequisite: Psychology 105; corequisite: Education 225d.*

DEPARTMENT OF MODERN LANGUAGES

Associate Professors Daiga (*Acting Chair*),
Goodling
Instructor Terrio

Bachelor of Arts

In addition to serving the increasing demand in the professions and industry for men and women who are at home in more than one linguistic and cultural setting, the Department of Modern Languages offers students a unique learning experience. The study of a modern foreign language brings together practical training in language skills (understanding, speaking, reading, and writing) with an understanding of the sociology, history, and literature of the culture from which the language springs and which it expresses. The pragmatic virtues of a usable skill thereby join the humane values of liberal education. The Department of Modern Languages offers programs of study which reflect its desire to encourage both mastery of one or more foreign languages and an overall appreciation of the cultural contexts in which they occur. It directly serves bachelor of arts degree candidates majoring in languages, students whose degree programs require studies in languages, and students who, for professional or personal reasons, wish to broaden their cultural background.

The Department of Modern Languages offers *majors in French, German, and Spanish*. A major in the Department may be met by completing 30 credit hours in one language above 112. A minimum of 9 hours above 112 must be taken in residence at Elizabethtown College. Language majors are required to participate in the Brethren Colleges Abroad program. Other students who have completed 112 or above are encouraged to participate in the program.

Department majors must include the following courses: in residence—Modern Language 211, 212, and 311; 323 or 324 and a three-credit independent study project (481–490); in the Brethren Colleges Abroad Program—Advanced Conversation and Composition, Phonetics, French/German/Spanish History, and History of (French/German/Spanish) Literature. After completing the required course work, majors must take the oral proficiency interview and receive a minimum proficiency rating of Advanced/Level 2.

The option of a *modern language minor* is also available. The minor will require a minimum of 12 credits above Modern Language 112 in the following courses: Modern Language 211, 212, 311 and 312 or 323. The internship, Modern Language 318, is optional. After completing the required course work, students must take the oral proficiency interview and receive a minimum proficiency rating of Advanced/Level 2.

The Modern Language Association Cooperative Foreign Language test is administered free of charge during Freshman Orientation Week and in spring semester of each year. It may be taken at any other time during the academic year for the general college fee of \$20.00. All students with more than one year of language preparation must take the placement test before registering in language courses for academic credit.

111 Fundamentals of Language and Culture (French, German, Spanish)

5 credits. Presents basic elements of structure and the phonetic system in culturally authentic contexts. The course objective is the development of communicative competence in five skill areas: speaking, listening, reading, writing, and sociocultural awareness. Emphasis on culture-based documents and collateral laboratory assignments. Fall semester.

112 Fundamentals of Language and Culture

5 credits. (Core) Continuation of 111 with expansion of structures, contexts and cultural topics. Completes bachelor of arts language requirement. *Prerequisite: 111 or placement by examination.* Spring semester.

211 Oral Expression (French, German, Spanish)

3 credits. Emphasizes expanded functional proficiency with particular attention to the speaking and listening skills. A functional-notional syllabus allows for progression through essential language functions presented in a variety of culturally authentic contexts. Students study selected contemporary texts to provide a frame for their discussions and to review grammatical structures. *Prerequisite: Modern Language 112 or permission of instructor.* Fall semester.

212 Textual Analysis and Composition (French, German, Spanish)

3 credits. Presented as a writing workshop stressing the skills needed for good expository writing. Students will be actively involved in the editing and revising of their work. They will study advanced grammatical structures and will be involved in textual analysis of selected prose masterpieces in the foreign language. There will be a continued emphasis on correct oral expression. *Prerequisite: Modern Language 211 or permission of instructor.* Spring semester.

311 Making of Modern Society (French, German, Spanish)

3 credits. Analyzes important contemporary cultural phenomena which are organized thematically (centralization, industrialization, class structure, education, etc.). By tracing the origins of current institutions, values, and attitudes, students will gain a perspective on the historical and cultural forces which shaped the modern nation. Readings will be taken from literary, sociological, and political sources. Films, slides and audio, and videotapes will supplement written materials. *Prerequisite: Modern Language 212 or permission of instructor.* Fall semester.

312 Languages for the Professions (French, German, Spanish)

A. Commercial French

3 credits. Provides practical training in French business practices and a knowledge of the essential vocabulary and style specific to business communication. Of equal importance is the development of a critical perspective on the structure and basic workings of French business and industry within the context of the society as a whole. *Prerequisite: Modern Language 211 or permission of instructor.* Spring semester.

B. Spanish for the Health Professions

3 credits. Offers practical and authentic Spanish relevant to the medical and social services. It also presents cultural attitudes, behaviors, and beliefs regarding health care issues that may influence the delivery of service to the Hispanic client. *Prerequisite: Modern Language 211 or permission of instructor.*

318 Foreign Internship (French, German, Spanish)

Variable credit. Internships will be considered as electives for the minor and must be preceded by at least one semester of study abroad in the target country. Internships will be awarded variable credit depending on the nature and length of the placement. Only students with an oral proficiency rating of Advanced/Level 2 and a B+ average in their language course work are eligible.

323 Introduction to Literature (French, German, Spanish)

3 credits. (Core) Develops students' ability to read thoroughly, analyze, and appreciate literature. Selected readings representative of different literary genres.

371–380 Special Topics (French, German, Spanish, Russian*)

Variable credit. Topics of special interest not otherwise covered in the curriculum. Topics depend upon student interest and faculty availability.

481–490 Independent Readings (French, German, Spanish)

Variable credit. (Core) For senior language majors. Independent projects in some area of language or literature. Project may fulfill literature Core requirement, provided topic relates to literature in the foreign language and not to the language itself.

(*Russian course would provide competence in the language.)

DEPARTMENT OF MUSIC

Professors Harrison, Shull (*Chair*)
Associate Professors Douglas, Kitchen,
Simmers, Stites
Assistant Professor Malcom

Bachelor of Arts; Bachelor of Science

The music programs are designed to develop student comprehension and appreciation of music as a cultural force in the past and present. Music majors are prepared for professional careers in education, therapy, and studio teaching, as well as graduate study.

The Department offers three majors leading to the degrees of Bachelor of Science in Music Education, Bachelor of Science in Music Therapy, and Bachelor of Arts in Music.

The music education major requires Music 101, 102, 103, 104, 105, 201, 202, 203, 204, 231, 234, 237, 301, 311, 312, 321, 322, 343, 415 or 417, 440, 441, 442, 471, a minimum of twelve hours of applied music instruction, a minimum of eight credit hours in ensemble participation, a senior recital, and Education 205 and 225d. Music education majors may elect a choral, instrumental, or general emphasis, the requirements of each emphasis varying slightly from the above. Approval of the major has been granted by the Pennsylvania Department of Education and the National Association of Schools of Music.

The music therapy major requires Music 101, 102, 103, 104, 105, 141, 151, 201, 202, 203, 204, 231, 234, 237, 252, 301, 311, 321, 343, 353, 354, 415 or 417, 440, 441, 442, 455, 456, 473, 474, 475, 476, 477, 478, 479, a minimum of eight semester hours in applied music instruction, a senior recital, and a minimum of six hours credit in ensemble.

Prior to admission into the Department:

- (1) The student will submit an application to the Director of Admissions during the year prior to the anticipated date of matriculation.
- (2) The student will audition in his primary and secondary performance areas before a committee of the music faculty.
- (3) The student will have an interview with a member of the Music Department in order to determine eligibility for admission.
- (4) The music faculty will select music majors for the next academic year and submit their names to the Director of Admissions.

Admission into the music therapy and music education majors does not imply that a student will be guaranteed completion of the degree. The advisor, in conjunction with the Music Department fac-

ulty, reserves the right to dismiss a student from the major on the basis of unprofessional behavior and/or unsatisfactory academic performance. The student has the right of appeal of a decision based on unprofessional behavior in the same manner as dismissal for academically related reasons.

In order to remain in the Department as a music therapy or music education major, a student must maintain the following standards:

(1) A music therapy major must earn a grade of C or better in all music and music therapy courses. A music education major must earn a grade of C or better in all music and music education courses, and in Education 205.

(2) Music therapy majors must satisfy the standards and requirements in all field work education, including clinical practicum experiences and the internship experience. Music education majors must satisfy the standards and requirements of the educational practicum and student teaching experiences.

A six-month internship in an approved clinical facility is required for the music therapy degree. This internship is taken after the completion of the four-year music therapy major.

The music therapy major is approved by the National Association for Music Therapy and the National Association of Schools of Music. The music education major is approved by the Pennsylvania Department of Education and the National Association of Schools of Music.

The Bachelor of Arts in Music normally requires Music 101, 102, 103, 104, 105, 201, 202, 203, 204, 321, 322, 415 or 417, 419, 440, 441, 442, twelve semester hours credit in applied music, a senior recital, and three hours of ensemble credit. The music requirements of the bachelor of arts degree are flexible and are determined by the needs and interests of each student. Under the guidance of a departmental adviser, each bachelor of arts music major works out a program which includes at least 40 hours of music courses.

The minor in music provides students with opportunities to acquire and develop skills in music theory, music performance, music history and literature, and allows each student to pursue his personal musical interests.

The minor in music requires Music 101–103; 102–104; 105; 415 or 417 or 441 or 442; performing competency in one applied music area equal to the end of the sophomore year level; minimum of three hours of music elective; minimum of two credits of music ensemble participation; and attendance at Repertoire Class (Music 100) for two semesters.

A student electing to minor in music must consult with the Music Department Chair who will assign a music faculty member to assist the student's academic advisor as necessary.

A copy of other Departmental graduation requirements for music majors, including proficiency requirements in piano and voice, and recital partici-

pation and attendance, may be obtained from the Department Chair's office.

The Music Department has a Preparatory Division which offers instruction to precollege students, adults, and college students who desire to take instruction without credit. Instruction is available from qualified college student instructors and Departmental faculty. Interested persons should contact the Director of the Preparatory Division.

100 Repertoire Class

No credit. This class meets weekly to provide students with solo and ensemble performing experience in an informal setting. Music majors are required to perform at least one time each year in Repertoire Class.

101 Music Theory

2 credits. (Core) Fundamentals of music theory, harmony, and form with emphasis on scales, keys, modes, and notation.

102 Music Theory

2 credits. (Core) A continuation of Music 101 with an introduction to nonharmonic tones and seventh chords. Includes binary and ternary forms plus elementary keyboard harmony. *Prerequisites:* Music 101, permission of instructor.

103 Fundamentals of Sight-Singing, Ear-Training, and Keyboard Harmony

1 credit. Development of visual, aural, and basic keyboard skills related to the theoretical and analytical materials covered in 101. *Corequisite:* Music 101. (Students who fail Music 103 will not be permitted to enroll in second semester theory, Music 102.)

104 Sight-Singing, Ear-Training, and Keyboard Harmony

1 credit. A continuation of 103. *Prerequisite:* Music 103 or permission of instructor. (Students who fail Music 104 will not be permitted to enroll in advanced music theory, Music 201.) Spring semester.

105 Introduction to Music Literature

3 credits. (Core) Introduction to the music of the Western world, major composers, and selected famous compositions, with emphasis on listening to music from the Baroque era to the present.

111 Voice Class

1 credit. (Core) Study of the fundamentals of breath control, tone production, and development of vocal technique. Open to all students.

113 Piano Class

1 credit. Designed to develop basic piano skills and knowledge of music fundamentals. Daily practice required. Not open to music majors. Credit for 113 given only upon completion of 114. Fall semester.

114 Piano Class

1 credit. A continuation of 113. *Prerequisite:* Music 113. Spring semester

117 Piano Class

1 credit. Basic piano skills. Open to all music majors; required of those whose first applied instrument is not piano. *Prerequisite:* permission of instructor for nonmajors.

119 Guitar Class

1 credit. An introductory course emphasizing studies in basic chords and note reading. Course also surveys various guitar styles, the performers, music, and types of guitars.

120 Guitar Class

1 credit. (Core) A continuation of Music 119 with emphasis on bar chords, accompaniment patterns, and note reading. Includes an introduction to classical guitar technique, history, performers, and classical literature. *Prerequisite:* Music 119 or permission of instructor.

141 Recreational Music

1 credit. The use of recreational instruments, materials and techniques with handicapped persons. *Prerequisite:* music major or permission of instructor. Spring semester.

151 Introduction to Music Therapy

3 credits. A survey of music therapy through lecture-demonstration sessions, reading, student reports, and field trips. Emphasis on the potentials of music therapy with a variety of populations. *Prerequisite:* music major or permission of instructor. Fall semester.

201 Advanced Music Theory

2 credits. Advanced harmony including seventh chords, chromatic harmony, and form and analysis. 18th century Counterpoint is introduced. Fall semester.

202 Advanced Music Theory

2 credits. A continuation of Music 201 with emphasis on 19th and 20th century harmonic practice. Includes compositions using 18th century contrapuntal techniques. Spring semester.

203 Advanced Sight-Singing, Ear-Training and Keyboard Harmony

1 credit. Continued emphasis on reading and dictation skills. (Students who fail Music 203 will not be permitted to enroll in Music 202.) Fall semester.

204 Advanced Sight-Singing, Ear-Training and Keyboard Harmony

1 credit. A continuation of 203. *Prerequisite:* Music 203 or permission of instructor; corequisite: Music 202.

231 Brass Class

1 credit. Methods of tone production, fingerings or positions, care and repair, and methods and materials for teaching trumpet or cornet, French horn, baritone, trombone, and tuba. Fall semester.

234 Percussion Class

1 credit. Methods of tone production, care and repair, and methods and materials for teaching snare drum, cymbals, timpani, and other percussion instruments. Spring semester.

235 History of Jazz

3 credits. (Core) Exploration of the chronological development of jazz as an American art form, from Blues and Ragtime to Third Stream and current styles. Offered on demand.

237 Elementary String Class

1 credit. Method of tone production, fingerings, care and repair, and methods and materials for teaching violin, viola, violoncello, and double bass. Fall semester.

238 Intermediate String Class

1 credit. A continuation of 237 dealing with the study of cello and double bass. *Prerequisite:* Music 237. Spring semester.

252 Psychological Foundations of Music

2 credits. Study of acoustics and the psychology of music as they relate to life and the music professions. An examination of the events and circumstances that occur in music and influence it. May be taken out of sequence or as an individual course by nontherapy majors. *Prerequisite:* music major or permission of instructor. Spring semester.

301 Keyboard Harmony

2 credits. A course designed to provide functional piano skills in harmonizing melodies, improvising music, and transposing at the keyboard. *Prerequisites:* Music 202–204, 269.

311 Music in the Elementary School

3 credits. Thorough study of objectives, methods, and materials for elementary school music programs through singing, instrumental, rhythmic, creative, and listening activities. Detailed study and use of recent school music songbook series. Observations and laboratory experience included. *Prerequisite: music majors or permission of instructor.* Fall semester.

312 Music in the Secondary School

3 credits. Methods and materials for secondary general music classes and performance groups, with special concentration on the junior high school general music class, adolescent voice problems, and the successful organization and direction of choral and instrumental performing groups. Observations and laboratory experience included. Spring semester.

321 Instrumental-Choral Conducting and Techniques

3 credits. Instruction in directing choruses, bands, and orchestras. Topics include conducting techniques, choral and instrumental methods and problems, score reading, and interpretation. *Prerequisite: Music 202 or permission of instructor.*

322 Instrumental-Choral Conducting and Techniques

3 credits. A continuation of 321. *Prerequisite: Music 321.* Spring semester.

325 Teaching Music in the Elementary School-Lab

1 credit. Music skills for elementary education majors. Fundamentals of music theory, chording skills on autoharp and piano (guitar optional), and music reading skills. May be exempted by proficiency exams. (A minimum grade of C is required.)

326 Teaching Music in the Elementary School

3 credits. Study of teaching methods and materials for use in a balanced elementary music program that includes rhythmic activities and movement, music reading, creating songs, singing, playing melody-harmony instruments, and listening activities. Topics include ways of promoting individual creativity and methods of integrating music with other aspects of childhood education. *Prerequisite: Music 325.* (A minimum grade of C is required for certification.)

337 Advanced String Class

1 credit. A continuation of 238 providing in-depth study of violin, viola, cello, or string bass, and an introduction to string ensemble techniques, methods, and literature. *Prerequisite: Music 238.* Fall semester.

343 Woodwind Class

1 credit. Methods of tone production, fingerings, maintenance, care and repair, and methods and materials for teaching flute, oboe, clarinet, bassoon, and saxophone. Fall semester.

344 Woodwind Class

1 credit. A continuation of 343. *Prerequisite: Music 343.* Spring semester.

353 Techniques in Therapy

2 credits. Course is designed to introduce behavioral research techniques and show how they apply to the uses of music in the therapeutic setting. Students will examine the role music has in altering social and academic behavior in therapeutic applications and in life as a whole. Active participation and research is required. *Prerequisite: Music 252.* Fall semester.

354 Research in Music

2 credits. Study of four basic research models and an appropriate research prose style. Emphasis on the potential application of experimental and quantitative research techniques to the study of music's effects on behavior. May be taken out of sequence or as an individual course by nontherapy majors. *Prerequisite: music major or permission of instructor.* Spring semester.

371-380 Special Problems

Variable credit. This sequence of courses permits the Department to offer courses to any group of students who express an interest in a particular area of study not a regular part of the curriculum.

415 Classical-Romantic Music Literature

2 credits. (Core) Survey of instrumental and vocal music of the Classical and Romantic periods. *Prerequisite: Music 105 or permission of instructor.* Fall semester.

417 Twentieth Century Music Literature

2 credits. (Core) Survey of music from Impressionism to the present avant-garde styles. *Prerequisite: Music 105 or permission of instructor.* Spring semester.

419 Counterpoint

2 credits. A study of contrapuntal techniques of the sixteenth through twentieth centuries through representative composers and original compositions. *Prerequisite or corequisite:* Music 202. Offered on sufficient demand.

431 Piano Methods and Materials

2 credits. Modern methods in teaching piano to children, youth, and adults. Course includes a survey of teaching materials for various stages of progress, teaching demonstrations, and experience. Credit for 431 will be given only upon completion of 432. *Prerequisites:* two semesters of Music 269. Alternate years.

432 Piano Methods and Materials

2 credits. A continuation of 431. *Prerequisite:* Music 431.

440 Instrumental Arranging

2 credits. Arranging music for large and small ensembles; class performance of student works is combined with a study of the characteristics of each standard instrument and instrumental group. *Prerequisites:* Music 202 and 204. Offered on demand.

441 History of Music

3 credits. Survey course from antiquity to the Baroque era with emphasis on the development of musical forms, styles, and media through considering music literature in its cultural environment. *Prerequisite:* Music 202 or permission of instructor. Fall semester.

442 History of Music

3 credits. Survey course from the Baroque through the Contemporary era with emphasis on the development of musical forms, styles, and media through considering music literature in its cultural environment. *Prerequisite:* Music 202 or permission of instructor. Spring semester.

455 Music in Therapy I: Principles

3 credits. Survey of experimental studies dealing with the effects of music on behavior, the intervention of music in therapy, and basic therapeutic approaches and techniques. *Prerequisites:* Music 252, 353, 354; or permission of instructor.

456 Music in Therapy II: Practices

3 credits. Therapeutic approaches and techniques in music therapy. *Prerequisite:* Music 455 or permission of instructor.

471 Professional Internship in Music Education

12 credits. Teaching experience and observation in elementary and secondary music classes. Instrumental and vocal emphases vary with student strengths and needs. *Prerequisite:* permission of Department.

473-78 Clinical Experiences I-VI: Music Therapy

1 credit each. Supervised field experiences (observation and participation) in an approved clinical facility. Minimum of thirty hours total for each clinical experience. Music therapy majors only. *Prerequisites:* Music 141, 151.

479 Professional Internship in Music Therapy

No credit. Six months of supervised practical experience with a registered music therapist in an NAMT approved facility. Taken only after completion of all other music therapy degree requirements. *Prerequisite:* permission of instructor.

481-490 Independent Study

Variable credit. The purpose of this course is to offer individual students opportunities for musical composition, arranging, or research under faculty supervision. *Prerequisite:* permission of instructor.

APPLIED MUSIC AND ENSEMBLES

Students who register for applied music for credit must meet minimum standards established by the Music Department and should contact the Department Chair or Secretary for a list of standards for each applied area. Students who have not attained the level necessary for credit through the Department's Preparatory Division may work through the Department's Preparatory Division (see p. 77). Nonmusic majors with no piano background or limited background may enroll in Piano Class (Music 113, 114). Students in applied music advance as rapidly as their abilities permit. In this process they must study technical exercises and literature from various musical periods and styles. Students may register with or without credit for the established music ensembles and for other ensembles organized under faculty supervision; they may repeat the ensembles for credit which they apply to the fine arts Core requirement. However, to receive credit, students must meet the standards for attendance at rehearsals and public performances established by the faculty director.

268 Voice

1 credit. (Core)

269 Piano

1 credit. (Core) Music therapy and music education majors whose principal instrument is not piano or organ must enroll in Music 117 before Music 269.

270 Organ

1 credit. (Core)

271 Violin

1 credit. (Core)

272 Viola

1 credit. (Core)

273 Cello

1 credit. (Core)

274 String Bass

1 credit. (Core)

275 Guitar

1 credit. (Core)

276 Flute

1 credit. (Core)

277 Clarinet

1 credit. (Core)

278 Oboe

1 credit. (Core)

279 Bassoon

1 credit. (Core)

280 Saxophone

1 credit. (Core)

281 Trumpet/Cornet

1 credit. (Core)

282 French Horn

1 credit. (Core)

283 Trombone

1 credit. (Core)

284 Baritone

1 credit. (Core)

285 Tuba

1 credit. (Core)

286 Percussion

1 credit. (Core)

360 Chamber Music

½ credit. (Core) General chamber music course from which groups such as Brass Ensemble, String Ensemble, Woodwind Ensemble, Chorale, Collegians (men's choir), Piano Trio, and Piano Ensemble will be formed as need arises.

361 Concert Choir

1 credit. (Core) Open to any student; acceptance based upon auditions by appointment. In addition to giving several performances prior to Christmas and participating in the annual Spring Concert, this group sings approximately twenty concerts in churches and schools in Pennsylvania and neighboring states each spring.

362 Choral Union

½ credit. (Core) Vocal ensemble open to any member of the student body (without prior audition). Its sections (SATB or SSA) are determined by the enrollment per part.

365 Orchestra

1 credit. (Core) Performs three major concerts during the academic year which constitute an invaluable part of musical training in literature and technique of performance. *Prerequisite for winds and percussion: permission of instructor.*

368 Jazz Band

½ credit. (Core) The Elizabethtown College Jazz Band serves as an integral part of the College curriculum. It functions as a laboratory and as a touring band, playing the best in swing and jazz with the big band sound. Its program of music includes swing, pop tunes, ballads, and jazz, including old standards and current progressive jazz.

369 Concert Band

1 credit. (Core) Open to any qualified student; acceptance subject to approval by director. Performances include the annual winter and spring concerts and a number of off-campus appearances.

DEPARTMENT OF OCCUPATIONAL THERAPY

Professor Bing (*Chair*)

Assistant Professors Petersen, Sebelist

Instructors Gavin, Morgan

Fieldwork Coordinator Simon

Bachelor of Science

Professional Accreditation: The Department of Occupational Therapy formally received accreditation in 1976 by the American Occupational Therapy Association and the American Medical Association.

Occupational therapy is a health profession that utilizes purposeful activity with people of all ages both to promote well-being and to improve existing function. The occupational therapist has competencies to effect change in individuals with developmental delay and physical and psychological dysfunction. The student in occupational therapy engages in a program that integrates the humanities and the behavioral and physical sciences with professional study, thereby reflecting the liberal arts and community service traditions of Elizabethtown College.

Emphasis on the importance of both the humanities and the sciences in preparing for professional life is further manifest in the philosophical approaches which shape the Department. The bases of the program are a comprehensive knowledge about human development, an awareness of the significance of socio-cultural environments, and an understanding of the dynamics of human relations.

The primary objective is to produce a graduate who is a generalist practitioner qualified for employment in hospitals, community agencies, schools, rehabilitation centers, extended-care facilities and related human services agencies. With this foundation, the beginning therapist can progress to specialized areas of clinical practice as well as research, administration, and academia.

Occupational therapy majors must take Occupational Therapy 113, 119, 120, 218, 219, 220, 222, 225, 307, 308, 313, 314, 315, 316, 319, 403, 408, 409, 412, 419, 420, 422, 423; Chemistry 101, 104; Biology 111, 201, 202, 202L; Psychology 105, 225; Anthropology 202 or 211; and Mathematics 151 and either 172 or 252. Due to course sequencing and competencies, Biology 201, 202, 202L and Psychology 225 must be taken at Elizabethtown College.

ACADEMIC AND FIELD WORK EDUCATION

The occupational therapy program comprises a four-year course of classroom study and at least six months of field work education. Students will be responsible for their transportation and travel costs to and from assigned clerkship and field work centers. Such assignments will begin in the junior year and continue throughout the program. Students should expect to pay room and board expenses during the Level-II field work experience in the event these are not provided by the affiliated hospital or clinic. The student may select either of the following options:

First Option: The student may complete three years of academic work followed by three months of Level-II field work experience during the summer between the junior and senior years. The student will then complete the senior academic year followed by three months of Level-II field work the next summer.

Second Option: The student may complete four years of academic work followed by six months of Level-II field work experience.

ADDITIONAL FIELD WORK EDUCATION

After completing the required six months of Level-II field work, the student may elect to complete an additional Level-II field work and may pursue this study in areas such as pediatrics, mental retardation, gerontology, home health, hand rehabilitation, sensory integration, school system, advanced psychosocial or physical rehabilitation, research, administration and education.

RELATED EXPENSES

Additional expenses for the occupational therapy student normally include uniforms, school patches, malpractice liability insurance, registration examination fee, and similar charges. Although not required, all students will be urged to become members of the American Occupational Therapy Association and the Pennsylvania Occupational Therapy Association at the reduced student rates.

NATIONAL CERTIFICATION EXAMINATION

Upon being awarded the degree in occupational therapy and successful completion of Level-II field work, the student is eligible to sit for the national certification examination, held twice a year, usually in June and January.

**ADMISSION REQUIREMENTS
FOR DEPARTMENT****1. Prior to admission into the Department:**

- a. The student will submit an application to the Director of Admissions before December 15 of the year prior to the anticipated date of matriculation. Students are admitted into the program in the fall semester only. **DUE TO COURSE SEQUENCING, THE DEPARTMENT DOES NOT ACCEPT TRANSFER STUDENTS FROM WITHIN OR OUTSIDE THE COLLEGE.**
- b. The student will have an interview with a member of the Occupational Therapy faculty and/or a practicing clinician in order to determine eligibility.
- c. The Occupational Therapy faculty will select the students for the next academic year and submit their names to the Director of Admissions.
- d. The Department of Occupational Therapy requires that the student submit an updated medical history on forms provided by Elizabethtown College with the application for admission. The examination may be completed by the student's family physician or by the College physician at cost to the student. It is also required that the student sign a waiver to release information in the medical history to the Department of Occupational Therapy. Due to the clinical component of the program, the Department reserves the right to require that the student submit additional medical histories or obtain medical treatment should a problem (physical or emotional) arise which the Department feels may jeopardize the student's participation in the program.

2. Evaluation after admission into the Department:

- a. Admission into the Department of Occupational Therapy does not imply that a student will be guaranteed completion of the entire course of study nor that he will be eligible to sit for the certification examination. The student will be reviewed by a faculty evaluation committee at the conclusion of each academic year. If the committee believes that a student is not suitable academically or professionally for the area of study, the student will be counseled into other areas of endeavor. In order to remain in the Department, the student must maintain the following standards:
 - (1) Have at least a 2.5 average in all courses required for the major (both occupational therapy and related requirements).
 - (2) Satisfactorily meet the standards and requirements in all phases of field work

education including Level-I field work, laboratory, and Level-II field work experience.

The curriculum in occupational therapy may be subject to revision during the period 1985–86.

113 Basic Concepts in Occupational Therapy

3 credits. An introduction to the theoretical basis for the practice of occupational therapy. The historical importance of purposeful and creative activity suitable for the life span continuum; the cultural and developmental use of activity to foster normal development and to treat emotional and physical dysfunction. Involvement in community activities will enrich student understanding of cultural influence. Fall semester.

119 Construction Activities I

2 credits. Overview of construction activities using hard materials such as wood, tile, copper and splinting media. Instruction in the basic skills of the process with emphasis on activity analysis and therapeutic application in occupational therapy. *Prerequisite for nonmajors: permission of instructor.* Fall semester.

120 Construction Activities II

2 credits. Overview of construction activities using soft materials such as weaving, textiles, needlework, macrame. Instruction in the basic skills of the process with examination of each activity for its therapeutic potential. *Prerequisite for nonmajors: permission of instructor.* Spring semester.

218 Kinesiology I

2 credits. Application of the principles of functional anatomy. Emphasis on normal movement and patterns of movement including body mechanics, grasp and gait analysis. *Prerequisites: Biology 201; and for nonmajors: permission of instructor.* Spring semester.

219 Expressive Activities

2 credits. An overview of activities used to facilitate the expression of emotion in a therapeutic setting. Some of the media to be included are puppetry, painting, collage and blockprinting. *Prerequisite for nonmajors: permission of instructor.* Fall semester.

220 Life Skills

2 credits. An examination of the daily activities of man including self-care, vocational, recreational and social functions. Emphasis and analysis of normal patterns of activity through lecture and laboratory sessions. *Prerequisite for nonmajors: permission of instructor.* Spring semester.

222 Group Process

2 credits. A learning experience in which the student is exposed to theories, dynamics and stages of groups. Planning occupational therapy activity groups will be emphasized. *Prerequisite for nonmajors: permission of instructor.* Spring semester.

225 Human Development Laboratory

3 credits. Refer to Psychology 225 for lecture description. The laboratory emphasizes the central nervous system maturation as it relates to normal sequential motor development and social/emotional growth. Concentration is on reflexive motor behavior and age appropriate activities during the multiple stages of the life continuum. *Corequisite: Psychology 225.* Fall semester.

307 Neurobehavioral Science I: Neurology

3 credits. A review of basic neuroanatomy and neurophysiology with emphasis on the functional neuronal systems (motor, sensory, limbic), clinical conditions, and therapeutic treatment. *Prerequisites: Biology 201, 202, 202L.* Fall semester.

308 Neurobehavioral Science II: Perspectives in Psychiatry

3 credits. This course examines major psychiatric disorders, medication, treatment techniques and team responsibilities and relevant philosophical issues. Community mental health will be included. *Prerequisites: Psychology 105, 225.* Spring semester.

313 Medical Surgical Conditions I

2 credits. Medical lectures relative to the etiology, prognosis and treatment of the major conditions resulting in physical disability. Fall semester.

314 Medical Surgical Conditions II

2 credits. Lectures relative to etiology, prognosis and treatment of major pediatric diagnoses and other general medical conditions. Spring semester.

315 Physical Rehabilitation

4 credits. Overview of evaluations and treatment intervention strategies, including the neurodevelopmental, biomechanical, and rehabilitative approach used to enhance the function of individuals with major physical disabilities. Lecture, laboratory, seminar, and Level-I Field Work experience. CPR certification included. *Prerequisite: Occupational Therapy 218; corequisite: Occupational Therapy 307.* Occupational therapy majors only. Fall semester.

316 Psychosocial Rehabilitation

4 credits. An examination and application of major psychiatric theories relevant to occupational therapy. Various evaluation tools, treatment plan design, ethical concerns, case studies, and professional reporting will be coordinated with Level-I Fieldwork experience, lecture, laboratory, and seminar. *Prerequisites: Psychology 105, 225, Occupational Therapy 222; corequisite: Occupational Therapy 308.* Occupational therapy majors only. Spring semester.

319 Splinting and Orthotics

2 credits. Functional anatomy of the hand incorporated in basic splinting and orthotic principles. Emphasis on evaluation and fabrication techniques with application to specific disabilities. *Prerequisite: Biology 201; corequisite: Occupational Therapy 315.* Occupational therapy majors only. Fall semester.

325 Sign Language

2 credits. This course is designed to develop basic competency in the use and comprehension of American sign language and to acquaint the learner with the cultural uniqueness of the deaf community.

370-79 Special Topics

Eight 1-credit courses covering Biofeedback, Community Mental Health, Computers in Rehabilitation, Gerontology, Hospice, Mental Retardation, and Rehabilitation of the Hand are offered as electives in alternate semester or year sequences, upon sufficient demand.

403 Perspectives in Pediatrics

3 credits. A comprehensive study of the treatment of pediatric patients with psychosocial and/or physical dysfunction. Impact on the family, importance of play, assessment tools and treatment techniques will be reinforced through Fieldwork experience. *Prerequisites: Occupational Therapy 314, 315, 316.* Fall semester.

408 Advanced Concepts with Material Cultures

3 credits. A study of the establishment and administration of occupational therapy programs. Quality assurance, the structure of AOTA, its relationship to the National Health Care System, and current legislative issues will be discussed. Fall semester.

409 Methods of Research

2 credits. This course embodies the scientific method as the basis for all research. Included will be research designs and evaluation and guidelines for conducting research. Fall semester.

412 Senior Practicum

2 credits. The course offers graduating occupational therapy seniors the opportunity to conduct scholarly research and/or in-depth investigation within an area of their major. Spring semester.

419 Prevocational Activities

2 credits. A study of the principles and techniques used in the vocational assessment of selected patients with potential for employment. Prerequisite activity courses will be the foundation for discussion and laboratory experiences. Spring semester.

420 Sensory Integration

2 credits. Introduction to study of the sensory integration of the central nervous system with exposure to standardized evaluation procedures, sensory integrative disorders and remediation techniques. Emphasis on theoretical considerations within a developmental framework. Lecture and laboratory. Fall semester.

422 Kinesiology II

2 credits. Advanced principles of movement including the influence of cultural, psychological, and physiological factors. Use of movement in the evaluation and habilitation/rehabilitation of individuals with dysfunction. Spring semester.

423 Human Relations

2 credits. An integrative approach to the relationship of the therapist and patient emphasizing the responsibilities of both. Group interaction, one to one therapeutic relationships, roles and leadership will be addressed. Fall semester.

PHILOSOPHY

See Department of Religion and Philosophy, page 94.

DEPARTMENT OF PHYSICAL EDUCATION AND HEALTH

Associate Professor Ober (*Chair and
Athletic Director*)

Assistant Professors Garrett, Kauffman,
Smith, Whitmore
Instructor Roderick

The Department of Physical Education and Health affords an opportunity for all students to develop an interest in play and recreation which will be fun and worthwhile to them during college and later life. We strive to develop social and moral standards such as sportsmanship, teamwork, tolerance, and other character benefits which come from properly conducted play.

All students at Elizabethtown College are required to take four semester hours of physical education courses of which two may be taken in aquatics. Students must take at least one semester of an aquatics activity or successfully complete a proficiency test in swimming. A swimming proficiency test, given at the beginning of each semester, must be taken no later than the fall of the sophomore year. This test may be taken only once. A transfer student who desires to take the test must do so at the beginning of his first semester.

The remaining physical education requirements may be satisfied by electing any of the courses offered except Physical Education 275 and 285. No more than six semester hours of physical education may count toward the 128 hours required for graduation from the College. Physical Education 270 counts as three credits towards graduation, but only one activity towards Core.

105 Beginning Swimming (women)

1 credit. (Core) Elementary-level instruction in the basic strokes for nonswimmers.

115 Intermediate Swimming (women)

1 credit. (Core) Instruction in the techniques of the basic strokes, survival swimming, and water safety.

125 Beginning Swimming (men)

1 credit. (Core) Elementary-level instruction in the basic strokes for nonswimmers.

135 Intermediate Swimming (men)

1 credit. (Core) Instruction in the techniques of the basic strokes, survival swimming, and water safety.

145 Field Hockey-Volleyball (women)

1 credit. (Core) Rules, playing techniques, and skill development.

150 Adapted Physical Education

1 credit. (Core) Individual activity or corrective exercises adapted to the needs and abilities of the student. Graded pass/no pass. *Prerequisite: recommendation of a physician.*

155 Tennis-Bowling (coed)

1 credit. (Core) Rules, playing techniques, and skill development.

160 Adapted Physical Education

1 credit. (Core) Individual activity or corrective exercises adapted to the needs and abilities of the student. Graded pass/no pass. *Prerequisite: recommendation of a physician.*

165 Golf-Badminton (coed)

1 credit. (Core) Rules, playing techniques, and skill development.

185 Basketball (women)

1 credit. (Core) Rules, playing techniques, and skill development.

195 Soccer

1 credit. (Core) Rules, playing techniques, and skill development. Fall semester.

205 Archery-Badminton (coed)

1 credit. (Core) Rules, playing techniques, and skill development.

210 Basketball (men)

1 credit. (Core) Rules, playing techniques, and skill development. Spring semester.

217 Senior Life Saving

1 credit. (Core) Instruction and practice in life-saving, water safety, and pool management. Meets Red Cross certification requirements. Graded pass/no pass.

218 Water Safety Instruction (coed)

1 credit. (Core) Advanced lifesaving skills, swimming instruction, and use of pool equipment. Meets Red Cross Instructor certification requirement. Graded pass/no pass. *Prerequisite: current Senior Lifesaving Certificate.*

225 Tennis (women)

1 credit. (Core) Rules, playing techniques, and skill development. Fall semester.

235 Tennis (men)

1 credit. (Core) Rules, playing techniques, and skill development. Fall semester.

240 Bowling

1 credit. (Core) Rules, playing techniques, and skill development.

245 Racquetball (women)

1 credit. (Core) Rules, playing techniques, and skill development.

250 Volleyball (coed)

1 credit. (Core) Rules, playing techniques, and skill development.

255 Handball-Racquetball (men)

1 credit. (Core) Rules, playing techniques, and skill development.

260 Adapted Physical Education

1 credit. (Core) Individual activity or corrective exercises adapted to the needs and abilities of the student. Graded pass/no pass. *Prerequisite: recommendation of a physician.*

265 Physical Conditioning (coed)

1 credit. (Core) Techniques of exercise, jogging, weight training, and body development.

270 Advanced Individual Sports

3 credits. (Only one hour counts for Core.) Methods, techniques, and teaching skills in selected sports. Summer session only.

275 Contemporary Health Problems

3 credits. A study of contemporary physical, mental, and social aspects of personal and community health problems. Educational principles applied to teaching in the elementary school.

285 Physical Education for the Elementary School Child

3 credits. A study of the physical growth of children from ages 4-12, with consideration of games and activities appropriate to the physical development of the child in the elementary grades.

290 Interpretive Dance Theory (coed)

1 credit. (Core) The development of an awareness of the body as an instrument which can communicate ideas, thoughts, and emotions through dance. Priority given to music therapy majors. Fall semester.

295 Introduction to Body Movement and Dance Form (coed)

1 credit. (Core) Disciplines of ballet and muscular control.

370-380 Special Topics in Physical Education (coed)

1 credit. (Core) These courses may include such physical activity courses as horsemanship, bicycling, self-defense techniques, skiing, and so forth, for which there will likely be an extra charge. Graded pass/no pass.

481-490 Self-Directed Physical Education Activity

1 credit. (Core) Designed for the student who attends Evening Division, or studies abroad, or has extenuating circumstances which prohibit him from meeting regularly scheduled physical education classes. Graded pass/no pass.

DEPARTMENT OF PHYSICS AND EARTH SCIENCE

Associate Professors Custer, Thompson
Assistant Professor Bowman (*Acting Chair*)

Bachelor of Arts; Bachelor of Science

Programs in the Department of Physics and Earth Science are designed to convey an appreciation and understanding of physical and natural systems and to prepare students for professional careers in contemporary society. In accord with the philosophy that both majors and nonmajors should be broadly exposed to studies of natural phenomena, the Department offers a wide variety of formal courses and informal learning experiences, many of which are intended to develop students' abilities for continuing self-education. Analysis, problem solving, and hands-on experience are emphasized at all instructional levels.

Students majoring in Department programs commonly go on to careers in physics, engineering, computer technology, and teaching, or to graduate school.

The Department offers four programs: 1) a Bachelor of Science in Physics, 2) a cooperative program in engineering at the completion of which the student is awarded a bachelor of science degree from The Pennsylvania State University and a bachelor of arts degree from Elizabethtown College, 3) two options for secondary education majors: physics or general science with a concentration in physics, and 4) a physics minor. In addition, a major in physics may pursue a premedical program.

Physics majors are required to take Physics 132, 231, 232, 305, 306, 343, 344, 345, 403, 404, 407, 408, 490; Chemistry 101, 104; Mathematics 121, 122, and 222; and six credits of electives from Mathematics 201, 321, 324, 351, 361, or 362.

Majors in engineering will complete three years at Elizabethtown College and two years at The Pennsylvania State University. To be eligible for admission at The Pennsylvania State University, a student must have a 2.3 cumulative average at Elizabethtown College and be recommended by Elizabethtown College. Students who have studied at The Pennsylvania State University prior to matriculation at Elizabethtown College must have a quality point average of at least 2.5 for all college work taken. At Elizabethtown College the student will complete Physics 132, 231, 232, 305, 306, Drawing 115, 116; Mathematics 121, 122, 222; Chemistry 101, 104; and other courses required for the specific field of engineering chosen. (For

specific other requirements, a student should confer with Department Chair and/or Registrar.) A student recommended for transfer to the Pennsylvania State University will be eligible to enter any of the following engineering curricula provided they have maintained the indicated quality point average: 3.0 (chemical, civil, electrical, mechanical, and engineering science); 2.50 (aerospace, agricultural, environmental, industrial, mining, nuclear, petroleum and natural gas, metallurgy, and ceramic science).

Secondary education majors in physics are required to take Physics 132, 231, 232, 344, 404; Chemistry 101, 104; Biology 105, and 106 or 108; Mathematics 121, 122; Computer Science 115; Psychology 105; Education 305, 225d, 415, 225e, 473; and six additional credits of electives from the offerings of the Department of Physics and Earth Science.

Secondary education majors in general science (physics concentration) should consult the interdisciplinary section of the catalog for a complete description and a listing of required courses.

Physics minors are required to take Physics 132, 231, 232, 344; and two additional physics courses selected from those taken by majors. (Physics 404 is highly recommended.) This minor will allow the majors in computer science, mathematics, biology, and chemistry to develop a broad-based competency in basic physics. It is also suitable for majors in other departments who enjoy the rigors of physics but who are unable to fit a full physics major program into their schedules. (Students should carefully check the course listing for the prerequisites for each physics course.)

Premedical students may also major in physics. They must meet the requirements for a Bachelor of Science in Physics but with additional courses in biology and chemistry. More details are given in the Premedical and Allied Health Programs listing in the interdisciplinary section.

111 Introduction to Physics

4 credits. (Core) Introduction to the concepts of physics through a study of the laws of motion, energy, electricity, light, relativity, radioactivity, and other topics of interest. Hours: lecture 3, laboratory 2. (Students planning to take Physics 132 or 203 should not take Physics 111.)

203 General Physics I

4 credits. (Core) First semester of a comprehensive study of the principles of physics with applications and instrumentation. Topics include mechanics, waves, sound, light, optics, and electricity. Hours: lecture 3, laboratory 2. *Prerequisite: Mathematics 101 or competency in high school algebra and trigonometry.* Fall semester.

204 General Physics II

4 credits. (Core) Continuation of 203. Topics include heat, radioactivity, and magnetism. Hours: lecture 3, laboratory 2. *Prerequisite: Physics 203.* Spring semester.

132 College Physics I

4 credits. (Core) First of a three-semester series which investigates basic principles of physics using differential and integral calculus. Topics include measurement, Newton's laws, impulse-momentum, work energy, linear and rotary concepts, equilibrium of rigid bodies, and oscillations. Hours: lecture 3, laboratory 2. *Corequisite: Mathematics 121.* Spring semester.

231 College Physics II

4 credits. (Core) Second of a three-semester series which investigates basic principles of physics using differential and integral calculus. Topics include gravitation, fluid dynamics, waves, sound, thermodynamics, charge and electric fields. Hours: Lecture 3, laboratory 2. *Prerequisite: Physics 132; prerequisite or corequisite: Mathematics 122.* Fall semester.

232 College Physics III

4 credits. (Core) Third of a three-semester series which investigates basic principles of physics using differential and integral calculus. Topics include electricity, magnetism, light, and introductory quantum physics. Hours: lecture 3, laboratory 2. *Prerequisite: Physics 231.* Spring semester.

305 Introduction to Mechanics I

3 credits. (Core) Introduction to vector analysis, conditions of equilibrium, coordinate systems, cables, virtual work, and oscillating systems; emphasis on problem solving. *Prerequisites: Physics 232, Mathematics 222.* Fall semester.

306 Introduction to Mechanics II

3 credits. (Core) Study of motion of systems of particles, motion of rigid bodies, particles in a central force field, accelerated coordinate systems, and the application of Lagrange's Equations; emphasis on problem solving. *Prerequisite: Physics 305.* Spring semester.

333 Computer Systems Interfacing (Chemistry 333, Physics 333)

3 credits. Digital logic and integrated circuits to implement logic; architecture and machine language programming of minicomputers and micro processors; design, testing, and construction of instrument-to-computer and computer-to-computer interfaces; design and testing of supporting software. Spring semester.

343 Introduction to Quantum Theory (Chemistry 343)

3 credits. (Core) Introduction to the principles of quantum theory, radiation, atomic spectra, and the extranuclear structure of the atom. *Prerequisites: Physics 232, Mathematics 222.* Fall semester.

344 Modern Physics

3 credits. (Core) Introduction to nuclear and atomic processes. Topics include radioactivity, the nuclear force, nuclear interactions, quantum statistics, solid state applications, and elementary particles. *Prerequisite: Physics 232.* Spring semester.

345 Advanced Physics Laboratory

2 credits. (Core) Advanced laboratory with experiments in modern physics, electricity and magnetism, optics, and thermodynamics; employs a variety of experimental techniques. *Prerequisite: Physics 343.* Fall semester.

370–379 Special Topics in Physics

Variable credit. (Core) Study of an advanced topic, experimental or theoretical, of special interest to the student. *Prerequisite: permission of instructor.*

403 Kinetic Theory and Thermodynamics

3 credits. (Core) Study of the kinetic theory of matter, statistical mechanics, and the principles of thermodynamics, including temperature, heat, work, internal energy, entropy, and enthalpy. *Prerequisites: Physics 232, Mathematics 222.* Spring, alternate years.

404 Electronics

4 credits. (Core) Practical and theoretical study of fundamental components and circuits, including transistors, diodes, integrated circuits, electron beams, filters, amplifiers, control circuits, and some digital electronics. Hours: lecture 3, laboratory 3. Fall, alternate years. *Prerequisite: Physics 232 or permission of instructor.*

407 Electricity and Magnetism I

3 credits. (Core) First of a two-semester sequence dealing with static and time dependent, electric and magnetic fields, electronic components, measurements, and properties of matter. Topics include vector calculus solutions of field equations, boundary conditions, network theory, electrical properties of matter, and basic properties of static magnetic fields. *Prerequisite: Physics 232.* Fall, alternate years.

408 Electricity and Magnetism II

3 credits. (Core) Continuation of 407. Topics include magnetic properties of matter, time dependent fields, Maxwell's equations, radiation, and special relativity. *Prerequisite: Physics 407.* Spring, alternate years.

481–489 Independent Study

Variable credit. (Core) Study and experimentation in an area of interest to the student and faculty member. *Prerequisite: permission of instructor.*

490 Seminar

2 credits. (Core) directed experimental or theoretical study requiring faculty acceptance of proposal and a final formal report of work. *Prerequisite: permission of instructor.*

DRAWING**115 Graphics and Descriptive Geometry**

2 credits. Study of engineering-related drawing, including projection systems, lettering, sketching, pictorial drawing. Descriptive drawing will include three-dimensional problems whose solution requires change in position and rotation. Students must provide themselves with suitable drawing equipment. Hours: lecture 1, laboratory 5. Fall semester, alternate years.

116 Graphics and Descriptive Geometry

2 credits. A continuation of 115. Additional topics include intersection of objects, vectors, and graphs. *Prerequisite: Drawing 115.* Spring semester, alternate years.

Education 305 Practicum in Secondary Education: Science

4 credits. Teaching science in secondary schools. *Prerequisite: Psychology 105; corequisite: Education 225d.*

EARTH SCIENCE**105 Field Earth Science**

8 credits. (Core) Intensive introductory program of field and laboratory studies emphasizing in situ instruction. Includes geologic and topographic mapping, and investigations of the earth and atmosphere. *Prerequisite: permission of instructor.* Summer sessions.

107 Astronomy

4 credits. (Core) General principles of solar system and stellar astronomy; laboratories provide practical experience in determining astrometric quantities. Algebra is used to treat topics throughout the course. Hours: lecture 3, laboratory 2.

108 Meteorology

4 credits. (Core) General studies of causes, effects, and distribution of atmospheric phenomena. Laboratories include collection and analysis of weather and climatic data. Hours: analysis 3, laboratory 2. Fall and spring semesters.

111 Physical Geology

4 credits. (Core) Study of the physical earth incorporating its materials, processes, and forms. Topics include minerals, rocks, volcanoes, glaciers, earthquakes, and plate tectonics. Hours: lecture 3, laboratory 2. Spring semester.

112 Historical Geology

4 credits. (Core) Study of the history of the earth and its life forms, as well as methods utilized to decipher the earth's past. Hours: lecture 3, laboratory 2. *Prerequisite: Earth Science 111.* Fall semester.

301 Mineralogy/Petrology

3 credits. (Core) Introduction to systematic crystallography and mineralogy, stressing identification and associations. Igneous and metamorphic petrology includes genetic processes, and microscopic and hand specimen petrography. Hours: lecture 2, laboratory 2. *Prerequisite: Earth Science 111 and permission of Department Chair.*

370-379 Special Topics in Earth Science

Variable credit. (Core) Study of an advanced topic, experimental or theoretical, of special interest to the student. *Prerequisite: permission of instructor.*

481-489 Independent Study

Variable credit. (Core) Students are required to define and do significant research on a problem in the earth sciences.

DEPARTMENT OF POLITICAL SCIENCE

Professor Selcher (*Chair*)

Assistant Professors McClellan, McDonald

Bachelor of Arts

Through the liberal arts blend of social science and the humanities which is political science today, the Department seeks to assist the student in thinking clearly and logically about political questions facing the community, state, nation, and world. The Department perceives three principal approaches to the discipline: the normative approach considers the values and ethical choices inherent in public policy; the empirical approach employs techniques to analyze how political systems function; the policy-oriented approach encourages the individual to responsible and informed action as citizen, government official, lawyer, or businessman. A major in political science provides preparation toward a career in party or interest group politics, law, public administration, regional and urban planning, personnel and public relations, teaching, publishing, communications, the diplomatic corps, political research, and consulting, among others. Beyond its worth in career terms, the study of politics and government can lead to more effective pursuit of one's political interests as a civic responsibility or as an avocation.

The major in political science requires the following courses which comprise the principal subfields of the discipline: Political Science 117, 118, 202, 205, 301, 308, and 330, and twelve credits of political science electives. In addition, Mathematics 151 and Sociology 331 are required. General electives from the other social sciences are encouraged.

For a *minor in political science*, the student shall successfully complete 21 hours of course work, composed of the following political science courses: 117, 118, 202, 205, and 301 or 308, and two elective 300/400-level courses. The electives shall be chosen in consultation with the Department. For students with specific personal or career interests, the Department recommends the following courses: (1) political communications/journalism/public relations: Political Science 323, 333 (Mass Media and American Politics); (2) law/paralegal/criminal justice: Political Science 329, 401; (3) business administration: Political Science 334 (Government and Business); (4) international

affairs: Political Science 305, 342, 413; (5) political theory: Political Science 329, 382; and (6) public administration: Political Science 471.

The Department participates in *the secondary school certification in social studies program* and *the forestry and environmental management major*, offering a political science concentration in each. Students with interests in these areas should consult the detailed descriptions in the interdisciplinary section of this catalog, page 105, 104.

105 Introduction to Government

3 credits. (Core) Introduction to the basic terms, concepts, methodologies, and ideas of the tradition of Western political thought with a special emphasis on those ideas which have contributed to the development of the American political order.

117 American National Government

3 credits. (Core) Analysis of the development of the federal system, civil rights and liberties; public opinion, political organizations, and elections; the presidency, Congress, federal bureaucracy and courts; federal government policies in economic and foreign affairs.

118 State and Local Government

3 credits. (Core) Analysis of the politics, institutional structures and processes, and policies of state and local governments in the U.S.; comparison of different types of state and local systems and their handling of issues such as education, criminal justice, and social welfare.

202 Political Theory

3 credits. (Core) Analysis of the development of significant political ideas from the Greek city-state to the present. Spring semester.

205 International Relations

3 credits. (Core) Survey of political, economic, legal, psychological, and military features of international relations with consideration of national interest, foreign policy, diplomacy, alliances, and nuclear deterrence.

301 Comparative Governments

3 credits. (Core) A comparison of the structures and functions of the political systems of selected foreign nations, emphasizing the historical development of party systems, political cultures, and executive-legislative relations. Fall semester.

305 American Foreign Policy

3 credits. (Core) Analysis of United States foreign relations since World War II, with emphasis on the development of current major issues, the domestic and bureaucratic politics of foreign relations, and policy options in current and future problems.

308 Public Administration

3 credits. (Core) A study of administrative organization, personnel administration, decision-making, and communications, with emphasis on the relation of administrative bureaus to the public, the executive office, the legislature, and the judiciary. Fall semester.

323 Politics Through Film and Literature

3 credits. (Core) An examination of a variety of political novels and films and how these art forms have significantly shaped our understanding of politics. Democracy, totalitarianism, social inequality, and the prospects of nuclear war are among some of the topics examined.

329 American Political Thought

3 credits. (Core) Historical analysis of major American political thinkers from the Puritans to the present with special consideration of the founding principles of the American republic. Fall semester.

330 Research Methods (Sociology 330, Social Work 330)

3 credits. Techniques of empirical political research and the development of modern methods of analysis and data presentation in political science, with reference to contributions from other social sciences. A major research project on methodology is required. Fall semester.

333-339 Topics in Public Policy

3 credits. (Core) Detailed examination of topics in policy development and analysis, such as government regulation of business, the mass media and American politics (fall, 1986), and public policies in such areas as health and education.

342 Politics of Developing Nations

3 credits. (Core) An analysis of interdisciplinary theories of political development with application to specific case studies of contemporary nation-building in transitional societies. Spring semester.

370-379 Special Problems

3 credits. (Core) Topical areas and problems of political science; subjects chosen in accord with student demand.

382 Modern Ideologies

3 credits. (Core) A survey of Marxist, socialist, and democratic theories and an analysis of the motives and goals of their major proponents. Spring semester.

401 Constitutional Law

3 credits. (Core) History and development of the Constitution. Evaluation of leading Supreme Court decisions with emphasis on current decisions and cases in the light of history and of possible future trends. Fall semester 1986.

413 U.S. Security Policy

3 credits. (Core) Analysis of the impact of national security problems on the U.S. government and foreign policy with a focus on various policies for defense and peace. *Prerequisite: Political Science 205 or 305 or permission of instructor.* Fall semester.

471 Capitol Semester Internship

6 credits. Applied field experience in public administration as a junior assistant in the daily operations of state or local government agencies. *Prerequisites: Political Science 308 and permission of instructor.* Spring semester.

480-489 Independent Study

Variable credit. Designed to offer independent study to advanced students, making use of techniques of political science in specific problem areas not included in the Department's regular offerings.

DEPARTMENT OF PSYCHOLOGY

Associate Professors Dennis, Ellsworth
(Chair)

Assistant Professors Eiserer, Sagar

Bachelor of Arts; Bachelor of Science

The Psychology Department provides a liberal arts education, preparation for careers in human services and education, and preparation for graduate and professional training in clinical, experimental and applied psychology, and related fields. The student learns the principles and theories of psychology as currently understood and acquires the ability to derive new principles. The student is required to participate in topical and methodological studies and may participate in field experience and research and their evaluation.

The Department offers two degree programs: one leading to the Bachelor of Arts in Psychology and one leading to the Bachelor of Science in Psychology, these programs differing mainly in their General Education Core requirements. In addition, the Department offers a minor in psychology and offers a concentration for students pursuing the secondary education certification in social studies; see the interdisciplinary section of this catalog, page 105, for details.

Courses required for both the *bachelor of arts* and the *bachelor of science* degrees are Psychology 105, 106, 213, 218, 221, 317, 402, 413 or 414, and 425 or 435; psychology electives for a minimum of 33 credit hours and eight credit hours of biology. For the *bachelor of arts* degree, the student is also required to complete Modern Language 112 or to demonstrate equivalent competency; for the *bachelor of science* degree, the student is required to complete six credit hours of mathematics and three credit hours of computer science.

Courses required for *the minor* are Psychology 105, 213, and twelve additional credit hours, at least six of which are to be in upper division (300/400) courses. Students are encouraged to tailor their selection of courses to their personal and career goals in consultation with a member of the psychology faculty.

105 General Psychology

3 credits. (Core) An introduction to the principles of behavioral science including consideration of motivation, learning, personality, and sensory and perceptual processes.

106 Experimental Psychology

4 credits. (Core) An examination of the empirical and logical bases of psychological theories of perception, learning, memory and thinking, and motivation and emotion. Laboratory exercises provide evidence for contemporary psychological theories. Hours: lecture 3, laboratory 2. *Prerequisite: Psychology 105.* Spring semester.

213 Research Methods

4 credits. (Core) An introduction to the methods of psychology. Emphasis on research design and data analysis as the basis for evaluating psychological literature. Consideration is given to the philosophy of science. Hours: lecture 3, laboratory 2. *Prerequisite: Psychology 105.* Fall semester.

218 Psychological Statistics

3 credits. (Core) A discussion of psychological statistics, emphasizing analysis of variance, varieties of correlation, errors of measurement, and selected nonparametric procedures. *Prerequisite: Psychology 213.* Spring semester.

225 Developmental Psychology

3 credits. (Core) An introduction to physical, perceptual, linguistic, intellectual, and social-emotional human development, covering the periods of infancy, childhood, adolescence, adulthood, and old age. *Prerequisite: Psychology 105.*

235 Social Psychology

3 credits. (Core) An introduction to the processes by which the social environment influences human thought, feelings, and behavior, providing coverage of such topics as conformity, prejudice, aggression, pro-social behavior, attraction, and love. *Prerequisite: Psychology 105.*

317 Learning

4 credits. (Core) Study of major theories, methods, and empirical findings in the area of both human and animal learning. Students conduct various experiments with humans and animals. Hours: lecture 3, laboratory 2. *Prerequisite: Psychology 213.* Fall semester.

321 Theories of Personality

3 credits. (Core) A critical comparison of the major theories of personality, including psychoanalytic, humanistic, behavioral, and social learning approaches. *Prerequisite: Psychology 105.* Fall semester.

322 Abnormal Psychology

3 credits. (Core) A study of mental disorders including schizophrenic, substance abuse, anxiety, and psychosexual disorders. Research and theories regarding diagnosis, causes, and treatments are reviewed. *Prerequisite: Psychology 105.* Spring semester.

333 Tests and Measurements

3 credits. (Core) An introduction to the standardization, validity, and reliability of psychological tests, including the study of standardized tests and their interpretation. *Prerequisite: Psychology 105.* Spring, 1987.

334 The Exceptional Child

3 credits. (Core) A survey of the research and theories on the physical, intellectual, and social-emotional deviations of children, including an examination of both psychologically handicapped and gifted children. *Prerequisite: Psychology 225 or permission of instructor.* Spring semester.

370-379 Special Problems in Psychology

Variable credit. (Core) Directed study of topics not otherwise covered in the curriculum. Offered when student interest and faculty availability justify. *Prerequisite: permission of instructor.*

401 Counseling Psychology

3 credits. (Core) An introduction to counseling and therapeutic skills. Substantial class time will be devoted to role-playing various counselor/counselee situations and an examination of the assumptions which students bring to the role of counselor. *Prerequisites: Psychology 105 and permission of instructor.* Fall semester.

402 History and Systems of Psychology

3 credits. (Core) A study of major historical systems in psychology, including structuralism, functionalism, behaviorism, gestalt psychology, and psychoanalysis. *Prerequisite: Psychology 105.* Fall semester.

413 Perception

3 credits. (Core) A study of the theories and empirical findings in the area of sensory and perceptual functioning with emphasis upon visual processing. Students will be expected to conduct a research project. *Prerequisite: Psychology 213 or permission of instructor.* Spring semester 1987.

414 Memory and Thinking

3 credits. (Core) A study of the theories and empirical findings in the areas of the acquisition and retrieval of information, concept formation, and problem solving. Students will be expected to conduct a research project. *Prerequisite: Psychology 213 or permission of instructor.* Spring semester 1986.

425 Advanced Developmental Psychology

3 credits. (Core) A study of the developmental theories of psychological abilities, traits, and processes, including a critical review of relevant empirical evidence. Students will be required to conduct a research project. *Prerequisites: Psychology 213, 225, and junior standing, or permission of instructor.* Fall semester 1985.

435 Advanced Social Psychology

3 credits. (Core) A critical examination of selected areas of social psychological research with attention to methodological issues and social relevance. Students will participate in original research. *Prerequisites: Psychology 213 and 235, or permission of instructor.* Fall semester 1986.

475 Field Study

4 credits. Supervised training and experience in a professional setting related to psychology, generally for two afternoons a week, plus weekly meetings with faculty members. Placement depends on student interest and goals, and availability of professional setting. *Prerequisites: Psychology 105 and permission of instructor.*

480-489 Independent Study in Psychology

Variable credit. (Core) This course offers the mature student the independence to pursue educational experiences not otherwise available in the curriculum. *Prerequisite: permission of instructor.*

491-492 Research Practicum

Variable credit. (Core) Research in psychology under the close supervision of a faculty member. Topics for research are chosen in an area of interest to both persons. Offered by individual faculty-student arrangement. *Prerequisites: Psychology 213 and permission of instructor.*

DEPARTMENT OF RELIGION AND PHILOSOPHY

Professors Clemens, Puffenberger,
Ritterspach, Snowden, Sutphin (*Chair*)

Bachelor of Arts

Considering the heritage of religion and philosophy, the Department seeks to broaden the student's liberal arts curriculum by pursuing creative ventures which often cross over traditional disciplinary lines. While committed to the Judaeo-Christian tradition, the Department does not profess a single denominational consensus; it operates in the midst of a complex and pluralistic religious field. The Department encourages in the student a reflective stance which focuses on the basic philosophies, value systems, and faith expressions of mankind as means of preparing the student for seminary, graduate school, social work, counseling, and journalism, among other fields.

A *major* shall complete 33 hours of course work in the Department beyond the six hours required in the General Education Core. At least 27 hours of this course work must be above the 100 level. A major will be required to complete a six-hour senior research project by independent study to be supervised and read by at least two members of the Department.

A student seeking a *double major* shall complete 24 hours of course work in the Department beyond the six hours required in the General Education Core. At least 18 hours of this course work must be above the 100 level and must include one three-hour Independent Study (Religion or Philosophy 480-89). A student who desires a double major shall declare his intentions to the Department during his junior year. A student who plans religion and philosophy as part of a double major and pursues a bachelor of science degree must complete at least one semester of a modern language or one year of an ancient language.

A *major*, including a *double major*, must take the following courses: Religion 125, Religion 201 or 202, Religion 221 or 222, Philosophy 105, and Philosophy 115.

A *minor* shall complete 15 hours in the Department beyond the six hours in the General Education Core. The following courses are required in the minor program: Religion 125, 201 or 202, 221 or 222, and Philosophy 105. Any student electing the religion and philosophy minor must notify the Department Chair. The purpose of the minor program in religion and philosophy is to acquaint the

student with the major divisions within these two areas of study and to provide a basis for future personal inquiry.

RELIGION

105 *The Bible: Themes and Issues*

3 credits. (Core) An introduction to the scriptures of Judaism and Christianity with special emphasis upon their original setting in life. An important aspect of the course is familiarization with techniques of Bible study.

115 *Religions of the Modern World*

3 credits. (Core) A survey of the major Eastern and Western religious traditions from phenomenological, cultural, and comparative points of view.

125 *Contemporary Religious Issues*

3 credits. (Core) A constantly changing survey of relevant problems and issues on the contemporary religious scene with primary emphasis upon the thought patterns rather than the institutional forms of the Judaeo-Christian faith.

201 *Introduction to the History, Literature, and Faith of Israel*

3 credits. (Core) A study of the history of Israel as a basis for understanding the literature of the Old Testament and Biblical ways of faith; an introduction to the various tools of Biblical criticism. Fall semester.

202 *Introduction to the History, Literature, and Faith of Christianity*

3 credits. (Core) A survey of New Testament history, an orientation to the literature of the New Testament, and an appreciation of the conditions which gave rise to Christianity. Spring semester.

221 *Western Religions*

3 credits. (Core) A study of the major religions of the Near East and the Western hemisphere. Primary emphasis on a historical and comparative study of Judaism, Christianity, and Islam. Fall semester.

222 *Eastern Religions*

3 credits. (Core) An encounter with the major living religions of the Far East with emphasis upon comparative study of Hinduism, Buddhism, Jainism, Confucianism, Taoism, Sikhism, and Shinto. Spring semester.

230 *Religion in America*

3 credits. (Core) A study of the rich diversity of religious America within the setting of the larger cultural and social experience. Emphasis on the uniquely American religious experience, and the identity and integrity of each separate tradition.

231 *Contemporary Theology*

3 credits. (Core) A deeper exposure to some aspect of theological thinking or to the study of a particular theologian or group of theologians. Religion 125 recommended. Fall, alternate years.

301 *New Testament Greek I*

3 credits. An introduction to the fundamentals of reading *koine* Greek, the language of the New Testament. Fall semester.

302 *New Testament Greek II*

3 credits. A continuation of 301 with emphasis on mastery of the grammar; commencement of reading in the New Testament itself. *Prerequisite: Religion 301.* Spring semester.

310 *Archaeology and the Bible*

3 credits. (Core) The significance of recent discoveries in Biblical archaeology in Israel, with further consideration of discoveries in Mesopotamia, Egypt, and Syria. Generally, field work in Lancaster County excavations will be a part of the course. *Prerequisite: Religion 201.* Spring, alternate years.

320 *Biblical Theology*

3 credits. (Core) A study of the nature and meaning of the redemptive acts of God in the history of the Hebrews and early Christians. *Prerequisites: Religion 201, 202.* Spring, alternate years.

330 *Anabaptist and Pietistic Movements*

3 credits. (Core) A study of the historical and theological backgrounds of the Anabaptist and Pietistic movements as they relate to the Church of the Brethren and other denominations within the context of "The Believer's Church." Spring, alternate years.

340 *History of Christian Thought*

3 credits. (Core) A survey of representative thinkers in the history of the Christian Church and an examination of the central doctrines of the Christian faith. Religion 125 recommended. Fall, alternate years.

370-79 Special Topics in Religion

3 credits. (Core) An intensive study of a selected area within the sphere of religious faith. This course rotates among the Departmental staff and includes topics such as the following: liberation theology, evangelical theology, civil religion in America, Hebrew, the Buddhist tradition, esoteric religions.

480-89 Independent Study

Variable credit. Upon the student's initiative, a project of study and research may be undertaken with the supervision of a faculty member in the Department. The senior research project, required of all majors, will normally be registered during the student's senior year. For double majors the requirement is a three-hour independent study.

PHILOSOPHY**105 Contemporary Philosophical Issues**

3 credits. (Core) Concerns itself with issues such as human freedom, the search for the self, and meaning in human life. These issues are introduced by means of selected literary and philosophical texts.

115 Contemporary Ethical Issues

3 credits. (Core) An examination of current issues with attention to the way in which moral norms function within the individual and the society. Emphasis upon heightened self-awareness and the perspective of social ethics.

201 Ancient and Medieval Philosophy

3 credits. (Core) A comparative study of the Platonic and Aristotelian views of life, treating them as metaphors of life rather than as speculations about the nature of life. Fall semester.

212 Aesthetics

3 credits. (Core) An inquiry into the nature of creativity in the areas of art and science, beginning from the assumption that by comparing and contrasting creativity in these two areas the student comes to a greater understanding of artistic creativity. Spring semester.

213 Philosophy and Science

3 credits. (Core) A series of readings on scientific methodology, explanation, limitation of science, science and society, science and ethics, and science and religion.

255 Advanced Ethics

3 credits. (Core) A constantly changing inquiry into the values, norms, and thought forms used in the areas of bioethics, environmental ethics, business ethics, and the ethics of conflict and social change.

310 Contemporary Philosophy

3 credits. (Core) Study of selected primary sources in existentialism and phenomenology in order to understand some of the more important philosophical assumptions of contemporary culture. Fall semester.

315 Attitudes Toward Death

3 credits. (Core) A multidisciplinary introduction to the meaning and mystery of death and dying. It presupposes the notion that "the best preparation for life is an in-depth study of its existence."

320 Philosophy of Religion

3 credits. (Core) A study of man's rational efforts to establish the validity of the religious perspective with particular emphasis on theism, the proofs for the existence of God, and the nature of evil. Spring semester.

340 Modern Philosophy

3 credits. (Core) Reading and discussion of primary sources from the writings of Descartes, Spinoza, Leibnitz, and Kant. Offered on demand.

370-79 Special Topics in Philosophy

3 credits. (Core) A constantly changing specialized study within the field of philosophy or ethics featuring such areas as existentialism, philosophy of language, communal lifestyles, philosophy East and West.

480-89 Independent Study

Variable credit.

DEPARTMENT OF SOCIOLOGY/ ANTHROPOLOGY/ SOCIAL WORK

Professor Kraybill (*Chair*)

Associate Professors Eisenbise,

Iacono-Harris (*Director of Social Work
Program*), Lehr

Assistant Professors Bergel, Kessler, Nuccio

Bachelor of Arts; Bachelor of Science

The programs in this Department provide for the study of interpersonal and intergroup relationships, and the growth, changes, structures, and processes of human society. The courses reflect the philosophical tradition of service of Elizabethtown College and meet the challenges which arise from the struggles of increasing urbanization.

Students majoring in sociology, social work, and anthropology go to graduate school seeking higher degrees in public health, hospital administration, urban and regional planning, social work, law, sociology, or anthropology. Some move directly into careers in personnel work, social research, both adult and juvenile probation, private and governmental social welfare agencies, and in other fields where knowledge of the interrelationships of society is important.

The Department offers three basic majors leading to either a bachelor of science or a bachelor of arts degree. The Department also offers two minors. The *major in sociology* emphasizes theoretical and quantitative approaches so that the student can easily move into graduate programs or into career opportunities. The *major in sociology/anthropology* stresses basic anthropological principles and an acquaintance with the diversity of world cultures. The *major in social work* recognizes both the rural and urban environment of the Elizabethtown College community and seeks to prepare students for professional social work practice in either setting. Courses and field experiences emphasize the distinctiveness and the similarity of various social service delivery systems. The program is accredited by the Council on Social Work Education. The Department offers a *minor in sociology* and a *minor in anthropology*.

The Department also participates in the secondary education certification in social stud-

ies offering *sociology/anthropology concentrations*. Interested students should consult the detailed descriptions in the interdisciplinary section of this catalog, page 105.

The sociology major requires Sociology 101, 201, 330, 331, 332, and 498; Mathematics 151 and 252; Communications 105 (or passage of competency test). In addition, the student must elect four sociology or anthropology courses for a total of 30 hours.

The sociology minor requires 18 hours of course work including sociology 101, 201, 330, 332, and two elective courses in sociology.

The sociology/anthropology major requires five courses in sociology: Sociology 101, 201, 330, 331, and 332. In addition, the student must elect five anthropology courses.

The anthropology minor requires 18 hours of course work including Anthropology 201, 202, 360, and three additional courses in anthropology.

The social work major requires prospective students to apply for admission to the program. This application requires the following:

1. A formal interview with a social work faculty member where professional interests and abilities are explored.
2. Two reference rating forms completed by persons who know the applicant well.
3. Formal admittance to Elizabethtown College.

This application procedure may occur before the student enters Elizabethtown College or at any time after admittance. Admittance into the program does not guarantee that the student will graduate with a degree in social work. The advisor, in conjunction with the social work faculty, reserves the right to dismiss a student from the major on the basis of unprofessional behavior and/or academic performance. The student has the right of appeal of the decision based on unprofessional behavior in the same manner as dismissal for academically related reasons.

The social work major requires the following courses: Biology 105 and 106 or 108; Sociology 101; Psychology 105, 225; Political Science 117; Economics 101; Mathematics 151; Communications 105 (or passage of competency test); Social Work 222, 233, 240, 325, 327, 329, 330, 345, 347, 349, 470, 471, 498; plus nine credits of professionally related courses, directed toward the student's professional goal and approved by the social work advisor.

SOCIOLOGY**101 Introduction to Sociology**

3 credits. (Core) Basic concepts and theories relating to the study of society with emphasis on fundamental sociological methods and approaches.

105 Social Issues

3 credits. (Core) An introduction to the methods used by sociologists to define and analyze social issues. Implications for public policy are stressed. Special attention is devoted to population pressures and urbanization.

201 Principles of Sociology

3 credits. (Core) Introduction to the methods of social research and theory. Topics include the history of the discipline, the meaning and use of key concepts, and varied approaches to the study of sociology. *Prerequisite: Sociology 101.* Fall semester.

212 Population

3 credits. (Core) Population, its size, growth, trends, composition; the relation of population units in their various aspects to economic, social, political, and other major forces, trends, and institutions.

215 Criminology

3 credits. (Core) Sociological approaches to the study of crime, with emphasis on current sociological theory and research; special consideration of the judicial system and penology.

220 Race and Ethnic Relations

3 credits. (Core) Study of racial and other minorities in the United States, and their relationship with dominant groups. Includes study of discrimination, prejudice, racial myths, and methods of reducing intergroup tensions.

222 Introduction to Social Welfare (Social Work 222)

3 credits. (Core) The historical, philosophical, and sociological perspectives of social welfare. Social work, as one profession involved in social welfare, is explored and compared to other professions. Field trips to social service agencies. *Prerequisites: Sociology 101, Psychology 105.* Spring semester.

233 Human Behavior in the Social Environment (Social Work 233)

3 credits. (Core) A study of the interrelationships of social systems, with particular emphasis upon the impact of the environment on human development. Special consideration of the influence of ethnicity, racism, sexism, and ageism upon behavior and the implications for human service delivery. *Prerequisites: Psychology 225, Sociology 101.* Fall Semester.

237 Group Dynamics

3 credits. (Core) A consideration of empirical research in group dynamics within the larger attempt to integrate a theoretical understanding of group dynamics with its experiential application to everyday life.

305 Marriage and the Family

3 credits. (Core) A brief comparative view of different family patterns; a functional approach to questions related to both premarital and post-marital aspects of married and family life in our American culture.

317 Sociology of Religion

3 credits. (Core) An analysis of the role and function of religion and religious institutions in society; a study of religion as a social and cultural system.

330 Methods of Social Research (Political Science 330, Social Work 330)

3 credits. (Core) Basic procedures of sociological research, including research design, sampling, measurement, and data analysis. *Prerequisites: Sociology 101, Mathematics 151.* Fall semester.

331 Social Statistics

3 credits. (Core) Application of the concepts of Mathematics 151, Probability and Statistics, to particular statistical procedures used in social research and analysis. *Prerequisites or corequisites: Mathematics 252 and one of the following: Sociology 330, Political Science 330, Social Work 330.* Spring semester.

332 Sociological Theory

3 credits. (Core) An examination of the nature of theory and an analysis of sociological theories from early times to the present day with special emphasis on the major paradigms of contemporary sociology. *Prerequisites: Sociology 201, 330.* Spring semester.

342 Modern Corrections

3 credits. (Core) An overview of the origins, processes, organization, and contemporary trends of corrections for juveniles and adults, including an examination of current issues and alternatives to correctional policies.

344 Gerontology

3 credits. (Core) The study of several interrelated problem areas of the aged: physiological, psychological, and social.

350 Sociology of War and Peace

3 credits. (Core) A study of the social sources and consequences of war and peace utilizing a cross-cultural perspective with special attention to nuclear deterrence and the systemic forces that contribute to a peaceful world order.

360 Sociology of Complex Organizations

3 credits. (Core) An examination of the various structures and processes of formal organizations, interorganizational networks, interaction between organizations and their environments, conflict within organizations, and alternatives to bureaucracies. While business-type organizations will be emphasized, other types of organizations, including voluntary associations, schools, and political parties will also be examined.

371–380 Special Topics in Sociology

3 credits. (Core) Readings and discussion of topical areas of sociology. Topics may include, but not be limited to, the following: women in society, evaluation research, the arms race.

471 Internship

Variable credit. Applied field instruction in a subfield of the discipline chosen to meet the needs of the student. *Prerequisite: permission of instructor.*

481–491 Independent Study in Sociology

Variable credit. (Core) Offers to advanced students the opportunity for independent study, making use of sociological approaches, in areas not included in the regular offerings within the Department. *Prerequisite: permission of instructor.*

498 Senior Seminar

3 credits. Research in sociology under the close supervision of the instructor and with peer discussion and criticism. A completed research experience is required. *Prerequisite: permission of instructor; prerequisites or corequisites: Sociology 330, 331, 332.*

ANTHROPOLOGY**201 Physical Anthropology**

3 credits. (Core) An introductory course in the study of human beings as physical organisms, their place in nature, their biological development and differentiation, and their early cultural attainments. Fall semester.

202 Cultural Anthropology

3 credits. (Core) An introductory course in the study of culture, its nature and characteristic features, with special attention to language, kinship, and religious systems, including a survey of the theories of culture and the methods for studying it. Spring semester.

211 World Cultures

3 credits. (Core) A survey of some of the peoples and cultures of the world from early times to the present with emphasis on physical, cultural, linguistic, and demographic factors. Fall semester.

306 Indians of North America

3 credits. (Core) A selective survey of native American groups, past and present, with particular attention given to the prehistoric background, the development of modern aboriginal lifestyles, and contemporary social problems.

307 Peoples and Cultures of Africa

3 credits. (Core) Ethnographic and cultural analysis of the folk background and contemporary customs of the peoples of sub-Saharan Africa with special attention to the problems of culture change.

308 Peoples and Cultures of Latin America

3 credits. (Core) Ethnographic and cultural analysis of the folk background and contemporary customs of the peoples of Latin America with special attention to the problems of culture change.

360 Sociocultural Change

3 credits. (Core) Theoretical perspectives on sociocultural change and a consideration of the mechanisms, patterns, and strategies of change.

371–380 Special Topics in Anthropology

3 credits. (Core) Readings and discussion of topics in anthropology chosen in accord with the needs and interests of the participants. Past topics have included Indians of North America, archaeology of Mexico, ethnography of Mexico, and primitive religion.

481 Independent Study in Anthropology

Variable credit. (Core) Designed to give the advanced student in anthropology the opportunity to pursue specialized topics not regularly offered.

SOCIAL WORK**222 Introduction to Social Welfare** (Sociology 222)

3 credits. The historical, philosophical, and sociological perspectives of social welfare. Social work, as one profession involved in social welfare, is explored and compared to other professions. Field trips to social service agencies. *Prerequisites: Sociology 101, Psychology 105.* Spring semester.

233 Human Behavior in the Social Environment (Sociology 233)

3 credits. A study of the interrelationships of social systems, with particular emphasis upon the impact of the environment on human development. Special consideration of the influence of ethnicity, racism, sexism, and ageism upon behavior and the implications for human service delivery. *Prerequisites: Sociology 101, Psychology 225.* Fall semester.

240 Basic Helping Processes

3 credits. Skills of providing effective human service, with emphasis on an understanding of human behavior and needs, the role of the helper, and various approaches to problem solving. Laboratory training. Both semesters.

325 Rural Social Welfare Systems

3 credits. The development and organization of the rural community; its network of services designed to address community, family, and individual problems; community development and administration of social service programs. *Prerequisite: Social Work 222.* Spring semester.

327 Urban Social Welfare Systems

3 credits. On-site study of a large urban area with emphasis on urban social problems and social service systems and on comparisons between urban and small town-rural areas. *Prerequisite: Social Work 325.* Mini-term.

329 State and National Social Welfare Systems

3 credits. Study of state and national social welfare policies and systems with emphasis on the relation of social problems, such as poverty, insecurity, and unequal opportunity, to social, economic, and political systems. *Prerequisites: Social Work 327, Political Science 117, Economics 101.* Fall semester.

330 Methods of Social Work Research (Sociology 330, Political Science 330)

3 credits. Fundamental instruction in understanding current research in social work and in applying this knowledge through the course project. *Prerequisite or corequisite: Mathematics 151.* Fall semester.

345 Generalist Social Work Practice I

3 credits. The first course designed to present theory and develop skills for generalist social work practice. The focus of this course is the individual. *Prerequisite: Social Work 240.* Fall semester.

347 Generalist Social Work Practice II

3 credits. The second course designed to present theory and develop skills for generalist social work practice. The focus of this course is groups and families. *Prerequisite: Social Work 345.* Spring semester.

349 Generalist Social Work Practice III

3 credits. The final course designed to present theory and develop skills for generalist social work practice. The focus of this course is on organizations and communities. *Prerequisite: Social Work 347.* Spring semester.

371-380 Special Topics in Social Work

3 credits. Reading and discussion of topical areas of social work. Topics will include, but not be limited to, women in society, evaluation research, ageing: needs and services, human sexuality, child welfare, family treatment, group treatment, services to minority groups.

470 Introductory Field Instruction

3 credits. Supervised field instruction for at least 200 hours in an agency. Student begins to assume responsibility with client systems in such ways as monitoring tasks, providing support, conducting group activities, and assisting the social worker with other professional responsibilities. Fall semester.

471 Advanced Field Instruction

14 credits. Supervised field instruction for at least 392 hours plus a weekly on-campus seminar. Students proceed from an “assistant” position to one of complete client responsibility under direct supervision. Roles students assume may include advocate, enabler, social broker, and program planner. *Prerequisite: permission of instructor; corequisite: Social Work 498.* Spring semester.

480–489 Independent Study in Social Work

Variable credit. Opportunity for advanced students independently to pursue study otherwise not available in the curriculum. *Prerequisite: permission of instructor.*

498 Senior Seminar

3 credits. Final course integrating the theory from preceding courses with the professional experience of field instruction. A major project required. *Prerequisite: Social Work 470; corequisite: Social Work 471.* Spring semester.

SPANISH

See Department of Modern Languages, page 74.

THEATRE

See Department of Communications, page 60.

Interdisciplinary Programs

PREMEDICAL AND ALLIED HEALTH PROGRAMS

James L. Dively (*Chair, Health Professions Advisory Committee*)

Members: Richard L. Bowman, Jack L. Hedrick, Frank Polanowski, Armon C. Snowden, Martin O. L. Spangler

Training for premedical and related disciplines, such as dentistry, osteopathic medicine, veterinary science, optometry, and podiatric medicine, may be accomplished through several routes. The *biology premedical concentration* prepares the student through specific requirements that are the same as those for the biology major except as noted on page 43. A second route is the *bachelor of science degree in biochemistry* (see page 53). Additional routes of potential interest include a major in most other departments, with sufficient concentration in basic sciences. Most medical schools, however, find that those students who are extremely well prepared in biology and chemistry make the most attractive candidates, and these majors comprise the overwhelming majority of students accepted. During a student's first year at Elizabethtown, he or she will follow a *curriculum similar to that outlined below*, with minor variations depending upon several factors, such as starting level in English and mathematics. After completion of the freshman year, all students should choose an academic major and follow the curriculum for that major in consultation with the appropriate academic advisor and the Health Professions Advisory Committee.

A close working relationship exists between the premedical student and the faculty members who monitor and evaluate the student's academic growth. Six faculty are currently members of *Elizabethtown's Health Professions Advisory Committee*, two each from the Departments of Biology and Chemistry, and one member each from the Departments of Physics and Religion and Philosophy. The

Committee serves the following functions: (1) to work jointly with premedical students and their major advisors to ensure that all courses required for entry into colleges of medicine are taken; (2) to advise students on registration and preparation for medical college admission tests; (3) to assist students in the preparation and submission of applications to medical colleges; (4) to draft a composite letter of evaluation and endorsement for worthy candidates and to forward this information to the appropriate medical college admissions committees; (5) to offer assistance in preparing for medical college interviews; (6) to solicit and collect literature that will aid students plan financially for their medical training; and (7) to maintain statistics on medical college placement for advising and administrative purposes.

The premedical student will introduce himself to the Health Professions Advisory Committee early in his freshman year and will formally register with the Committee shortly after declaring a major. This will normally occur during the fall semester of the sophomore year. At this time, students will find it prudent and beneficial to discuss future course scheduling, long-term career plans, and related matters with Committee members.

Most students need to register for *standard admissions tests*, such as the MCAT, during the early part of spring semester, junior year. After obtaining registration materials, students will seek the Committee's advice regarding the most effective methods of completing their preparation for these extremely important examinations. The majority of the tests are administered during spring, although the Committee may recommend that a student retake an examination during the fall testing period in the event of initial low scores.

During March of the junior year, the *Committee* will hold *interviews* with those students who will be seeking admission to medical schools. The Committee will use information obtained from the interview to write the letter of evaluation. During early April the student will again contact the Committee, this time to initiate the process of generating letters of recommendation and endorsement. Students are expected to solicit letters from three to five individuals, including at least three faculty members. After the Committee receives letters of recommendation and com-

pletes the personal interview with the student, the Committee will determine whether or not to prepare a written endorsement of the candidate. If such a letter is written, it will be forwarded, upon receipt of written notice from the student, to the appropriate medical college admissions committee. If the Committee does not choose to endorse the student, the student may solicit other individuals to write letters of evaluation, completing the application process himself.

Each spring semester the Committee receives **application service materials** for the various health professions. These materials are distributed to junior premedical students who are expected to complete them during the summer between the junior and senior academic year. Application service materials are normally submitted by the middle of September. After the student has completed and submitted applications to medical school, the Committee will offer assistance in preparing students for medical school interviews. This stage of the application process will culminate in mock interviews held between members and the premedical student. Generally, interviews at medical schools will be held during the fall semester of the senior year. Thus, it is imperative that premedical students notify the Committee of changes in status of their applications so that the Committee can plan for this important stage of the admission process.

The Committee believes that a strong positive recommendation and endorsement, combined with adequate scores on the requisite standard examinations and outstanding classroom performance, will put the candidate in an excellent position in the highly competitive admissions processes. The **College's placement record** indicates that this belief is well founded. Better than three-fourths of all Elizabethtown College applicants have been accepted (exceeding twice the national average), entering programs of excellent reputation, including those at Jefferson Medical College, Temple University School of Medicine and Dentistry, Philadelphia College of Osteopathic Medicine, Hahnemann Medical College, Pennsylvania State University College of Medicine (Hershey), University of Pittsburgh School of Medicine and Dentistry, University of Pennsylvania School of Veterinary Medicine, and Pennsylvania College of Optometry.

Representative First-Year Courses

<i>Credits</i>	<i>Fall Semester</i>
4	Biology 111
4	Chemistry 113
3	English*
4	Mathematics 121**
1	Physical Education
<i>Credits</i>	<i>Spring Semester</i>
4	Biology 112
4	Chemistry 114
3	English
4	Mathematics 122**
1	Physical Education

*Placement tests determine starting level.

**Required in chemistry option.

FORESTRY AND ENVIRONMENTAL MANAGEMENT

Bachelor of Science

The College offers a cooperative program with Duke University which leads to a bachelor of science degree from Elizabethtown and a Master of Forestry or Master of Environmental Management from Duke. The student who undertakes this major gains a wide exposure to the liberal arts through fulfilling the College's General Education Core in addition to courses in the student's major, and gains professional training at Duke in such areas as forest productivity, forest management science, resource ecology, water and air resources, resource policy and economics, or other individually tailored programs.

In this program the student spends three years at Elizabethtown College, fulfilling the General Education Core requirements, and two years at Duke's School of Forestry and Environmental Studies. In the first year at Duke the student completes the undergraduate degree requirements and is awarded the bachelor of science degree from Elizabethtown. After an additional year, Duke awards the degree of Master of Forestry or Master of Environmental Management. The cooperative program leading to a Master of Forestry Degree from Duke University is accredited by the Society of American Foresters.

In order to prepare students for the professional program at Duke, the College offers a preforestry and environmental management program with major and minor concentrations in biology, business, and political science; this program is detailed below. However, any undergraduate major can be considered for admission to Duke; such students should take at least one year of biology, mathematics, and economics.

Admission to Duke is by application and is based on an evaluation of a student's undergraduate record, Graduate Record Examination scores, letters of recommendation, and interviews.

There are variations of the schedule herein described. For further details contact Mr. Laughlin.

Majors shall complete all General Education Core requirements for the bachelor of science degree. Within the Core areas the following courses should be taken:

Mathematics Core (six hours): Mathematics 117, 151 or 172; 101, 121; or 121, 151. If 151 is not taken for Core, it is strongly recommended as an elective.

Science Core (eight hours): Majors with a concentration in biology should take chemistry; majors with concentrations in business or political science should take biology.

Social Science Core (nine hours): three of the nine hours must be in psychology or sociology/anthropology.

Each student will complete a major concentration in either biology, business, or political science, and two minor concentrations totaling 18 hours in the other two areas, with at least six hours in each area.

Biology: Major concentration recommendations are Biology 111, 112, 313–313L, 321, and two courses from Biology 215–215L, 235, 331, 332, or 347. Minor concentration recommendations are Biology 111, 112, 331; if only six hours are elected, they should be Biology 111, 112.

Business: Major concentration recommendations are Accounting 107, Computer Science 120 or 121, Economics 101, Business Administration 265, and either of the following two options: Accounting 108 and Economics 102, or Business Administration 331, 332. Minor concentration recommendations are any combination of Accounting 107, Economics 101, Computer Science 120 or 121, Business Administration 265. Economics 101 is, however, strongly suggested.

Political Science: Major concentration recommendations are Political 117, 118, 308, 471. Minor concentration recommendations are Political Science 308, 471; if only six hours are elected, they should be Political Science 471.

GENERAL SCIENCE CERTIFICATION

Bachelor of Science

Elizabethtown College offers a secondary education certification program in general science which is designed to lead to a general science teaching certificate in secondary education with a major concentration in biology, chemistry, or physics. The program aims to develop a comprehensive background for teachers in order that they may be better qualified to teach science in the general science curricula of junior high and middle school programs. The requirements of each concentration include a broad exposure to the other sciences and to mathematics, as well as to the instruction and experience in teaching provided by the professional education sequence.

The specific requirements for each of the concentrations follow:

Biology: a minimum of 24 hours in biology which must include Biology 111, 112, 215 and 215L, 313 and 313L; one course selected from Biology 212, 235, 331, 332, 341, 347; one course selected from Biology 321, 324–324L; Chemistry 113, 114; Physics 203, 204; two courses from Earth Science 107, 108, 111; Mathematics 101–121, or 117–172, or 117–151; Psychology 105; Education 305, 225d, 310, 415, 225e, 473.

Chemistry: a minimum of 24 hours in chemistry which must include Chemistry 113, 114, 213, 214; and eight hours from among Chemistry 242, 323, 323L, 324, 324L, 333, 343, 344, 351, 352; Biology 111, 112; two courses from Earth Science 107, 108, 111; Physics 132, 231; Mathematics 101, 121, 122; Psychology 105; Education 305, 225d, 310, 415, 225e, 473.

Physics: a minimum of 24 hours in physics which must include Physics 132, 231, 232, 343, 404; five or more additional credits in physics and drawing; two courses from Biology 105, 106, 108; Chemistry 101, 104; two courses from Earth Science, 107, 108, 111; Mathematics 101, 121, 122; Psychology 105; Education 305, 225d, 310, 415, 225e, 473.

SOCIAL STUDIES CERTIFICATION

Bachelor of Science

The social studies certification program involves the student in two general areas of study. First, the student acquires a mastery of the various subject fields that are a part of social studies teaching. Secondly, the program requires training in the techniques of teaching, along with actual teaching experience in a social studies classroom. Upon successful completion of the requirements in these two areas, students are certified to teach social studies in secondary schools in Pennsylvania and, by reciprocal arrangements, in several other states.

The academic segment of the student's preparation calls for specified courses in economics, history, political science, psychology, and sociology/anthropology. This background enables the student to prepare for teaching in all areas classified as the social studies in secondary schools. The student concentrates in depth in one of the areas. This concentration encourages thoroughness in understanding one area and also lays the groundwork for future graduate study in that subject.

Professional training in the skill of teaching is acquired through a college course on methods. In this course the student explores both the theory and the practical strategies of teaching. Finally, the student spends a semester actually teaching social studies in a secondary school classroom under the careful supervision of a competent secondary school teacher and a college professional who offer criticism, advice, and encouragement.

Detailed requirements for the social studies major follow:

Students must take one 24-hour major, two nine-hour cognates, and two six-hour cognates. All students must take the professional education sequence: Psychology 105; Education 305, 225d, 415, 225e, and 473.

Economics: The 24-hour major must include Economics 101, 102, and 18 elective hours in economics. The nine-hour cognate comprises Economics 101, 102, and three elective hours in economics. The six-hour cognate comprises Economics 101, 102.

History: The 24-hour major must include History 105, 201, 202, 390, one European history beyond 105; one non-United States, non-European history; and six elective hours in history. The nine-hour cognate comprises History 105, 201, 202. The six-hour cognate comprises History 105, 202.

Political Science: The 24-hour major must include Political Science 117, 118, 202, 205, 301, either 308, 330, or a 333–339 topic, and six elective hours in political science. The nine-hour cognate comprises Political Science 117, 118, 205. The six-hour cognate comprises Political Science 117, 118.

Psychology: The 24-hour major must include Psychology 105, 106, 213, 221, 225, 235, 322 and 370. The nine-hour cognate comprises Psychology 105 and six elective hours. The six-hour cognate includes Psychology 105 and three elective hours in psychology.

Sociology/Anthropology: The 24-hour major must include Sociology 101, 201, 330, 332, Anthropology 202, and nine hours planned in consultation with and approved by the social studies advisers in the Departments of Sociology and Education. The nine-hour cognate comprises Sociology 101, 201, and Anthropology 202. The six-hour cognate comprises Sociology 101, Anthropology 202.

Education 305 Practicum in Secondary Education: Social Studies

4 credits. Experience with and demonstration of various styles and strategies in the teaching of social studies in the secondary school classroom; in-school observation and internship, or paraprofessional experience are a part of the course. *Prerequisite:* Psychology 105; *corequisite:* Education 225d.

INTERNATIONAL STUDIES MINOR

Dr. Wayne A. Selcher (*Director of International Studies and Program Advisor*)

The International Studies Minor comprises a cluster of foreign cultures, language, and international affairs courses with a largely contemporary focus. Serving as a complement to the academic major, this minor provides the student with enhanced understanding of the conditions in the rest of the world which are just beginning to make themselves felt in the daily lives of Americans. In addition to the general liberal arts goal of broadening students' horizons of awareness of other peoples and places, the minor offers a valuable complementary education for many career-oriented and preprofessional programs of study.

The minor provides three principal categories of an international education: competency in a second language, knowledge of other cultures, and appreciation of global interdependence among nations.

The Business Department has an international studies concentration designed specifically for business majors. Details on this version can be obtained from the Business Department. The structure of the minor for all other majors consists of:

1. **Foreign language competency:** 6 semester hours in oral expression, textual analysis, and composition beyond the Modern Language 112 level, with an oral proficiency rating of Intermediate High/Level 1+ on the ACTFL/ETS scale.
2. **Three required foundation courses** (9 hours):

An 211	World Cultures
Ec 307	International Economics*
PS 205	International Relations
3. **Four elective courses** (12 hours) to be chosen from this list:

An 202	Cultural Anthropology
An 307	Peoples and Cultures of Africa
An 308	Peoples and Cultures of Latin America
BA 317	International Marketing
Ec 308	Comparative Economic Systems

Fr/Ge/Sp 311 Making of Modern Society

Fr/Ge/Sp 312A & 312B Languages for the Professions

Hi 205 Modern Far East

Hi 216 English History since 1603 (Modern Britain)

Hi 314 History of Soviet Russia

Hi 318 Age of Anxiety

Hi 323 History of China

Hi 324 History of Japan

Hi 327 History of Africa

Hi 328 Modern Africa

Hi 403 A History of United States Foreign Relations

PS 301 Comparative Governments

PS 305 American Foreign Policy

PS 342 Politics of Developing Nations

PS 413 United States Security Policy

Rel 221 Western Religions

Rel 222 Eastern Religions

Also: 370 courses which are approved by the International Studies Committee, such as Ec 371 (Economic Development).

In developing the minor, the student can choose electives to develop a thematic emphasis, such as regions of the world (e.g., Asia, developing nations), relations among nations, or a comparative or disciplinary perspective (e.g., on civilizations, religions, economics or politics). Study abroad is strongly encouraged. The Director of International Studies (Professor Wayne Selcher) will help a student with course selections. Courses taken for this minor may be counted to fulfill the college graduation requirement in international education and for either Core or major requirements (but not both). Completion of the minor will be indicated on a student's college transcript.

*Prerequisite: Ec 101

Academic Regulations



Academic Regulations

REGISTRATION

Students are required to register for classes on those days designated on the college calendar. Students registering later than the days specified will be charged a late registration fee. A student may register either as a regular or a nondegree student, and as full-time or part-time. Regular students only are degree candidates, and they must be in an approved major.

A student registers for courses—not for a time or professor. There is no guarantee that a student will get every course at the time requested.

Preregistration

To preregister, students must have met all financial obligations, including the payment of the preregistration deposit for the next semester.

Students preregister for the fall semester at the beginning of April. Preregistration for the spring semester usually takes place in late November. Master schedules and course request cards are furnished to the student approximately four weeks prior to this date, so there is ample time to make an appointment with the adviser.

Evening/Saturday students should check with the Office of Continuing Education for details about registration.

CHANGE OF REGISTRATION

Courses may be added within the first week of a semester and may be dropped without academic penalty during the first four weeks. Withdrawal from a class must be approved by the academic adviser and completed through the Registrar's Office.

THE STUDENT'S PROGRAM

EACH STUDENT IS RESPONSIBLE FOR MEETING ALL GRADUATION REQUIREMENTS. In that context the student is responsible for knowing the applicable

catalog materials; with this knowledge and in consultation with an advisor, a student should carefully prepare his course of study.

After a freshman is admitted into the College, the work of the first two years is largely intended to fulfill the requirements of the General Education Core, which provides a broad education and enables the student to select a major wisely.

In the junior and senior years most curricula afford time for a wide range of electives in addition to the prescribed courses outlined for each year. Many courses have prerequisites, and students are reminded of their responsibility for taking courses in sequence. To change from one curriculum to another, the student must consult with a member of the counseling staff.

Since the completion of at least 128 semester hours of work is required for a bachelor's degree, a student who plans to graduate in four years must include an average of at least 16 semester hours for each of eight semesters. However, many students wisely elect to take a lighter academic load in order to do better work and choose to attend a summer session or a part of a fifth year.

Overload credits

A student with average grades may carry up to 18 semester hours of work in any given semester except the summer session, when the maximum is 14 semester hours for the 10-week period. A student who has achieved a cumulative grade point of 3.00 or above may carry up to 20 semester hours credit in a semester, or 16 semester hours credit in a summer session. For each semester hour above 18 for which a student is enrolled in a given semester, an additional fee is charged, and approval by the Associate Dean of the Faculty is required. Students who wish to petition for an overload should obtain a form in the Registrar's office.

Full-time/part-time status

Any student taking 12 or more credit hours per semester at Elizabethtown College is considered a full-time student and will pay full tuition and fees. Any student taking 11 or fewer hours per semester will pay the regular semester hour rate plus applicable fees, and will receive a library card and full use of the library facilities. In a summer session, students holding a Pennsylvania Higher Education Assistance Agency (PHEAA) grant are considered full-time if they carry a minimum

of 12 semester hours divided among the terms. Tuition and fees are paid according to the schedule in the summer session brochure. For further details concerning summer session consult the summer session brochure available from the Registrar's or Continuing Education offices.

Class standing

The student's class standing is determined on the basis of the number of credits earned. After earning 30 credits, a student is considered a sophomore; with 60 credits a junior; with 90 credits, a senior.

CLASS ATTENDANCE

Class attendance is handled individually by the faculty members. It is the position of the College that the above-average student should be given some freedom of judgment as to his attendance needs, while the below-average student must, of necessity, be encouraged or required to maintain a record of regular attendance.

Each faculty member will announce his attendance policy at the start of each semester. A professor may dismiss a student from a course for excessive absences. A student may appeal for reinstatement to the Academic Standing Committee.

A student should take care of absences due to ill health or other personal problems through consultation with the professor.

CREDITS, GRADES, AND QUALITY POINTS

Credit is indicated in terms of the semester hour. Each semester hour unit signifies work completed in one 50-minute recitation, or two or more 50-minute lab periods per week for a semester of 15 weeks, or an equivalent learning experience.

Grades are reported for work as follows: *A*, excellent; *B*, good; *C*, satisfactory; *D*, poor; *F*, failing; *W*, withdrawal from class; *I*, work incomplete. A grade of *I* may be obtained by making a formal request to the professor of the course in question. The student and the professor must sign a written agreement which specifies the nature and the quantity of the work to be completed and the projected date of completion. In addition, a professor may use the *I* in cases of suspected academic

dishonesty. All grades of *I* received in the fall semester must be removed by April 1. Those received in the spring semester or summer session must be removed by October 1. Failure to do so results in a grade of *F*. A system of grade appeals may be found in the student handbook.

Quality points are given for credit as follows: for a grade of *A*, 4 per semester hour; *B*, 3 per semester hour; *C*, 2 per semester hour; *D*, 1 per semester hour; *F*, *P*, *NP*, and *WF*, no quality points.* Credits earned off-campus in programs under the jurisdiction of the College, or approved by it, or both, while the student is matriculated at the College, are considered on-campus credits.

The student's rank in class at graduation is based on the credits, grades, and quality points earned at Elizabethtown College.

REPEATING COURSES

Courses which may be repeated (see below) must be taken at Elizabethtown College; the most recent grade is final and is used in the calculation of semester and cumulative averages. When repeating a course, a student must file the appropriate repeat registration card in the Registrar's Office. Courses which may be repeated follow:

1. A student may repeat any course in which he has received an *F* or *NP*.
2. Ordinarily a student may not repeat a course in which he has earned a grade of *D*. However, upon the request of the student's adviser and the approval of the student's major department, a student may repeat a course in his major, a course required by the major, or a course that is prerequisite to a General Education Core requirement. The student must repeat the course in which the *D* grade was received within one year of the original enrollment in the class (or the next semester in which the course is offered if the course is offered less frequently than once a year).

PASS/NO PASS GRADING

Students may elect to take their required physical education courses on a pass/no pass basis. In addition, students may select one

*Note: Beginning with the fall term 1987, a plus/minus grading system will be introduced.

other course per semester to be graded in this manner under the following conditions:

1. A student who is in a bachelor's degree program must currently be of junior or senior standing (60 or more credits).
2. The cumulative average must be 2.75 or higher.
3. The selected course may carry no more than four semester hours of credit and must be a free elective. It must be outside the major or minor department, may not satisfy a Core requirement, and may not be a course required by the major or minor.
4. No more than four courses in total (excluding physical education) in the baccalaureate program may be taken under this grading option.

INDIVIDUAL PROGRAM ADJUSTMENTS

Academic departments reserve the right to counsel any student out of a major or minor for academically related reasons. A student has the right to appeal such departmental action to the Dean of the Faculty, who will direct warranted appeals to the Academic Standing Committee.

ACADEMIC PROBATION

Academic probation means that a student is in danger of being dismissed from the College for academic reasons. Students who fall into the following categories are placed on academic probation:

<i>Semester hours in the College:</i>	<i>with</i>	<i>Cumulative Grade Point below:</i>
1-18		1.70
19-36		1.80
37-54		1.90
55-72		1.95
73 or more		2.00

It is recommended that students on academic probation limit their load to four courses or 13 semester hours, whichever is less, in any semester in which the probation exists. The summer maximum should be two courses per term.

ACADEMIC DISMISSAL

The College, upon recommendation from the Academic Standing Committee, may at any time dismiss from the College a student who is on academic probation. Students should be aware that all cases are handled individually by the College, and that poor academic performance may result in dismissal at the end of any semester.

A student who is in academic difficulty (below 2.0 cumulative GPA) or on academic probation may be requested by the Academic Standing Committee, in consultation with the student, to enroll in a special or particular set of courses and to become involved in testing, counseling, or other developmental activities. Satisfactory performance by the student in such assignments may be interpreted by the Academic Standing Committee as satisfactory progress and may make it unnecessary for the Committee to dismiss a student.

READMISSION OF STUDENTS NOT IN GOOD ACADEMIC STANDING

A student who left the College while in academic difficulty (below 2.0 cumulative GPA) must petition the Academic Standing Committee, through the Office of the Dean of the Faculty, for readmission.

A student who has been readmitted to the College after an absence from the College of *five successive years* may, upon fulfilling certain requirements, have previous grades of *F* removed from the cumulative grade point average. For full information the student should consult with the College Registrar.

VOLUNTARY WITHDRAWAL FROM COLLEGE AND CLASSES

Withdrawal from college

Full-time students withdraw from the College through the Center for Counseling and Student Development; part-time students withdraw through the Registrar's Office. For purposes of billing, room reservation, and academic responsibility, the effective date of withdrawal will be the date on which the completed official notice is returned to the Center for Counseling and Student Development or the Registrar's Office. A student who withdraws without notification will re-

ceive no refund and may incur the full room penalty. Failure to comply with withdrawal procedures may result in loss of the privilege of readmission to the College and the right to the release of a transcript of credits earned.

Withdrawal from classes

Students withdraw from classes through the Registrar's Office. The appropriate form must be signed by the student's adviser and the professor for the course. The course will not appear on the permanent record if the student withdraws on or before the end of the fourth week of the semester. From this time to the end of the eleventh week, a withdrawal will result either in a grade of *W* or *W/F*. All withdrawals after the end of the eleventh week of the semester receive grades of *W/F* unless the withdrawal from college is for medical reasons, in which case a *W* will be recorded for each course. A student may not withdraw from *individual* courses for medical reasons. A grade of *W/F* is calculated into the student average as though it were an *F*.

INTERNSHIPS

Some academic departments offer internships for credit as part of approved academic programs. Other types of internships may be initiated by the individual student or be offered by other educational institutions, agencies, businesses, or organizations. For such internships the College publishes special guidelines, copies of which are available from the Registrar or Department Chair. Students are advised that the College will not grant academic credit or recognition for such internships without *prior* approval by the appropriate faculty member and administrative officer.

LEAVE OF ABSENCE

A student may take a leave of absence from the College to study abroad in the BCA program.

To arrange a leave, a student should contact the faculty coordinator or director of the appropriate program. Application must be made no later than the preregistration period of the semester prior to the one in which the leave begins. Any administration fees for off-campus programs are payable at the time a student applies for the leave. A leave is ap-

proved upon the student's acceptance into the program.

Preregistration information will be sent to students on leave approximately by March 15 or October 15. The preregistration card and a \$200 deposit must be returned to the Registrar's Office by May 1 or December 1 to ensure a place in the College and in the courses selected.

COLLEGE SCHOLARS

Students who have earned at least 60 credits at Elizabethtown College and have attained a 3.75 cumulative quality point average will be recognized as College Scholars for the succeeding academic year. They will be awarded a special certificate and their status as College Scholars will be recorded on their permanent records.

DEAN'S LIST

A full-time student who earns a quality point-credit ratio of 3.50 or better is regarded by the College as having performed with distinction, and that student is placed on the Dean's List of Honor Students for the semester.

SCHOLAR'S PRIVILEGE

Any full-time student who appeared on the Dean's Honor List during the preceding semester may, with the permission of the instructor, attend any class in the College on a space available basis as a scholar's privilege without registration or credit.

DEPARTMENTAL STUDENT PRIVILEGE

Any full-time or part-time junior or senior student may, with the permission of the instructor, attend any class within his major or minor department on a space available basis.

AUDITING COURSES

Students in good academic standing (2.0 or better) may elect to audit courses provided: (1) they do not preempt regularly enrolled students; (2) they have the permission of the

professor teaching the course. Audit hours are included in the total hours to determine full-time status and overload charges. A fee is charged on a per credit-hour basis for part-time students who wish to audit courses. Auditors, both full-time and part-time, must also pay any additional fees for labs, studio supplies, and so forth.

Students may add a course for audit or change a course registration from audit to credit during the first week of class only. Change of course registration from credit to audit cannot be made after completion of the fourth week of the semester. Once a course has been audited, it may not be taken for credit. Likewise, a course that has been completed for credit may not be repeated and recorded as an audit course.

The requirements for the audit will be determined by the professor. Upon completion of all such requirements, the audit will be posted on the student's permanent record card. Audit courses carry neither academic credit nor grade.

CREDIT BY EXAMINATION

Three ways exist for regularly admitted students to receive academic credits and/or advanced placement by examination: (1) the College Entrance Examination Board's Advanced Placement Program (CEEB), (2) the College-Level Examination Program (CLEP), and (3) successful achievement on an Elizabethtown College faculty examination (Challenge Testing).

CEEB ADVANCED PLACEMENT EXAMINATIONS

The College, with the approval of the department concerned, grants advanced placement and credit to students who perform satisfactorily on a CEEB Advanced Placement Examination.

CLEP EXAMINATIONS

Credit is awarded for appropriate scores on the CLEP examinations according to the following guidelines.

1. General Examinations

Persons who have completed high school (or its equivalent) more than 3 years ago may be awarded Elizabethtown College

credits according to the following standards.

- a. All General Examinations must be successfully completed prior to the achievement of sophomore status (30 or more semester hours of recorded college credit).
- b. Up to 29 semester hours of credit may be awarded for scores at the fiftieth percentile or better on the General Examinations. None of the credits may duplicate college credits already recorded on the transcript or credits for course work in process at the time of the examination.
- c. For the Natural Science Examination, a maximum of eight credits will be awarded for scores at or above the fiftieth percentile. Four of these credits may be applied to the General Education Core requirements in science.
- d. For the examination in English Composition, Humanities, and Social Sciences and History, a maximum of six credits for each examination will be awarded for scores at or above the fiftieth percentile. Up to three credits from each area may be applied to the corresponding requirement in the General Education Core requirements.
- e. For the Mathematics Examination, a maximum of three credits will be awarded for scores at or above the fiftieth percentile. These credits may not be applied to the General Education Core requirement in mathematics.

2. Subject Examinations

Credit will be granted for scores at or above the fiftieth percentile. Subject Examinations in an area in which the student will take additional work (either by requirement or elective) must be successfully completed prior to enrolling in college courses in that subject area.

CHALLENGE TESTING

Challenge Testing is a comprehensive term encompassing all tests prepared for the regularly admitted student by Elizabethtown College faculty. There are two types of Challenge Tests: Tests for Academic Credit and Tests for Placement and/or Waiver.

Tests for Academic Credit are of two kinds: *Proficiency Tests* such as the swimming proficiency test; and the *Challenge Exams* in which a regularly admitted Elizabethtown

College student requests to be examined for credit in a particular course from the College catalog. Requests for Challenge Exams must be approved by the chair of the department in which the course is listed. Practicums, internships, and research courses are excluded from the Challenge Exam option.

Tests for Placement and/or Waiver comprise tests such as those given for placement in English, modern languages, mathematics, or typing. No credit is awarded for such testing. All Challenge Testing is graded on a pass/no pass basis. A grade of *pass* indicates that the credit and/or advanced placement is to be awarded.

The fee for a Test for Academic Credit is \$50. The fee is for the test itself and is charged without regard to the test results. A fee of \$25 is charged for Tests for Placement and/or Waiver. Challenge Tests given at the initiative of the College are administered without fee to the student.

TRANSFER OF CREDITS

Students wishing to transfer credits to Elizabethtown College should obtain a permission form in advance from the Registrar's Office. The College will normally transfer credit (but not grades or quality points) for course work taken at another regionally accredited institution for which a grade of C or better was obtained.

Students who have achieved junior status (60 credits) either through work at Elizabethtown College or through a combination of work at the College and another institution are not permitted to transfer additional credits from a two-year institution to the College. Such students may transfer credits from four-year institutions, but only upon the prior approval of the Registrar. Students must request the Registrar's Office of the transferring institution to send an official transcript to the Registrar's Office at Elizabethtown College.

Students desiring to transfer credits from Elizabethtown College to another institution must make the request in writing to the Registrar's Office, in person or by mail, at least one week prior to the date needed.

GRADUATION REQUIREMENTS

Credit Requirements

To receive a bachelor of arts or bachelor of science degree from Elizabethtown College, the student must earn at least 128 semester hours credit or 130 semester hours if Mathematics 011 was completed. In the case of engineering, medical technology, and other special programs, the number indicated in the course outline, including all of the specific courses indicated, the General Education Core requirements, and the requirements for the major.

Grade Point Average

In order to be eligible for graduation, students must have a quality point-credit ratio of at least 2.00 with a minimum average of 2.00 in the major (and a 2.00 in the minor if the minor is to be recorded on the student's transcript). Students transferring from other colleges must have a ratio of at least 2.00 in courses pursued in residence at Elizabethtown College.

On-Campus Credits

To meet graduation requirements, the student must earn on-campus credits as follows: 1) a minimum of 15 credits in the major, at least eight of which are at the upper level (normally 300 and 400 level), and 2) at least 30 of the last 60 credits.

Graduation with Honors

At the time of graduation, a student who has achieved a cumulative quality point-credit ratio of 3.50 will be graduated *cum laude*; a ratio of 3.75, *magna cum laude*; a ratio of 3.90, *summa cum laude*.

Transfer students will receive honors if they have earned a minimum of 60 semester hours credit at Elizabethtown College, if they are recommended for honors by the major department, and if their averages meet the above requirements.

Other Requirements

Graduation requirements will be governed by the catalog and the Program Guide Book issued by the Registrar dated four years prior to graduation or by the catalog in effect at the time of graduation if the student so chooses. Transfer students are subject to the requirements of the catalog in effect when they begin studies at Elizabethtown College or the one in effect at the time of graduation. In no case, however, may a student use a catalog dated more than four years prior to graduation.

Elizabethtown College will graduate only those students who have met the moral and

financial obligations incurred in pursuit of their studies. The completion of the required number of semester hours does not in itself constitute eligibility for graduation.

The Office of the President must be notified by anyone who plans to be graduated in absentia.

It is the responsibility of the candidate for a degree in January, May, or August to make formal written application for the degree to the Registrar by September 15 or February 15.

Campus Life



Campus Life

COCURRICULAR EXPERIENCES

Because the education of students takes place in a variety of ways, their cocurricular life is a vital and integral part of the college experience. Through participation in the many clubs and organizations approved and sponsored by the Student Senate, in academic departments, the performing arts, and intercollegiate and intramural athletics, students have the opportunity to express individual interests, to grow in their understanding of the various academic disciplines, to develop leadership skills, and to enrich their liberal education.

Honorary Organizations

Alpha Lambda Delta
Alpha Psi Omega
Delphi Society

Clubs and Organizations

Accounting Club
Advocates for Peace
Alcohol Awareness
Black Student Union
Brethren Student Fellowship
Campus Gold
Circle K
College Democrats
College Republicans
Commuter Council
Concepts of Hillel
Elizabethtown Christian Fellowship
Eta Phi Sigma (Forensics)
International Club
Newman Club
Outdoor Club
Photography Club
Scuba Club
Self-Defense

Departmental Clubs

Accounting
Alpha Mu (Music Therapy)
American Chemical Society
Biology
Computer Science
Education Club
English Club
History
Marketing
Mathematics
Modern Languages
Occupational Therapy
Political Science
Pre-Health Professions
Psi-Chi
Psychology
Religion/Philosophy
Society of Collegiate Journalists
Society of Physics Students
Society for the Advancement of Management (S.A.M.)
Sociology/Social Work
Student Pennsylvania State Education Association
Volunteer Club
Women in Communications, Inc.

Performing Arts

Brass Ensemble
Chamber Ensemble
Choral Union
College Chorale
College/Community Orchestra
Concert Band
Concert Choir
Jazz Band
Piano Ensemble
String Ensemble
Woodwind Ensemble

Repertory Theatre
Sock and Buskin
Student Team of Entertainers and Performers (S.T.E.P.)

Lectures and Concerts

The College presents annually a varied program of music, dance, drama, films, and lectures, featuring distinguished artists and speakers. Student organizations in the performing arts, individual student recitals, and speakers in various student organizations not only provide further entertainment and instruction, but also permit participation of interested students.

Student Government

The Student Senate is the student arm of the College's campus government. Students are elected each spring on a representative basis from residence halls, academic departments, and the commuter population. Student senators are responsible for assuring a student voice in the Community Congress, the College's governance structure, and for allocating funds for student activities and organizations.

Activities Planning Board

The Activities Planning Board is composed of students who work with the Director of Student Activities to plan weekend and general campus social activities for the college community.

STUDENT PUBLICATIONS AND COMMUNICATIONS

Opportunity for self-expression is provided through the various student publications and radio communications:

The Etownian is a weekly newspaper published by students and available to all members of the college community.

The *Conestogan* is the college yearbook published annually and available each fall.

WWEC, the college radio station, managed by the Communications Department, broadcasts daily under the operation of a student staff. News of general campus interest, special features, and various types of music are carried at 640 on the AM band.

The Rudder, the student handbook and its supplement, is published by the Office of Student Affairs with the assistance of interested students. *The Rudder* serves as a guide and reference providing up-to-date and essential information about student life and services as well as many of the policies, rules, and regulations governing student life.

ATHLETICS

Elizabethtown College provides a varied intercollegiate and intramural sports program. It adheres to the principles and policies of the various athletic conferences of which it is a member.

Conference Membership

Men: National Collegiate Athletic Association (NCAA)

Middle Atlantic Conference (MAC)

Women: National Collegiate Athletic Association (NCAA)

Middle Atlantic Conference (MAC)

Facilities

The Alumni Physical Education Center houses offices, classrooms, and the Thompson Gymnasium. With seating capacity for sporting events for 2400 spectators, the configuration of the gym may be modified to provide three basketball courts, eight badminton courts, and four volleyball courts. There are also three racquetball/handball courts, a remedial gym, and a wrestling room. Other facilities include the swimming pool and bowling lanes in the Baugher Student Center.

Outdoor facilities include three soccer fields, a field hockey field, a baseball field with dugouts, a softball field, eight all-weather tennis courts, and intramural fields.

Intercollegiate Program

The sports program attracts many skilled athletes on an intercollegiate level. Intercollegiate sports for men include:

Soccer (varsity and junior varsity)

Cross-country

Basketball (varsity)

Wrestling (varsity)

Swimming (varsity)

Baseball (varsity)

Tennis (varsity)

Intercollegiate sports for women include:

Field Hockey (varsity and junior varsity)

Volleyball (varsity and junior varsity)

Cross-country

Basketball (varsity and junior varsity)

Swimming (varsity)

Tennis (varsity)

Softball (varsity)

Intramural Program

Recognizing the importance of sports participation regardless of the level of a participant's skill, the College maintains a broad intramural athletic program for men and women, arranged and directed by the Director of Intramural Sports working with interested students. Intramural teams are selected from residence halls, faculty, alumni, and commuters. If there is sufficient interest, several leagues are organized, according to ability levels.

Activities offered regularly:

- Bowling (coed)
- Flag Football (men)
- Racquetball (men, women)
- Soccer (men, women)
- Tennis (men, women)
- Volleyball (men, women, coed)

If there is sufficient interest other activities will be added. For example:

- Badminton (men, women)
- Basketball (women, coed)
- Chess (men, women)
- Handball (men)
- Lacrosse (men, women)
- Softball (men, women, coed)
- Swimming (men, women)
- Table Tennis (men, women)
- Tennis (coed)
- Water Polo (men, women)
- Wrestling (men)

STUDENT SERVICES

Freshmen Orientation Programs

The orientation programs help students learn about the academic community and student life at Elizabethtown College. This education begins with the original mailings to accepted students and their meetings with college personnel and continues throughout their initial experience on the campus.

Summer Orientation

All freshmen and their parents are invited to attend one of several orientation programs during the summer. During their stay on campus students and parents meet college administrators, faculty, and student leaders through a variety of seminars on college life. Students also meet individually with academic advisers to plan their fall schedule of classes.

Fall Orientation

Orientation continues in the fall when freshmen are required to arrive a few days before the upper classmen. During this orientation considerable attention is given to three areas: educational programs and requirements, college facilities, and social adjustment.

Student Center

The Baugher Student Center houses many student services and facilities. The first floor contains the Jay's Nest snack bar, alumni auditorium theatre, college swimming pool, bookstore, bowling alleys, and informal lounge, as well as commuter students' lockers and student mail boxes.

The second floor houses offices for the Dean of Student Affairs, Center for Counseling and Student Development, College Chaplain, Financial Aid, Housing, Career Development Center, Reber Conference Room, Commuter Lounge and Study, *The Etownian*, and *Con-estogan*.

Mail Services

Mail service personnel and package pickup are located in the Central Services Building adjacent to Alpha Hall.

Commuter Services

Commuters are provided with a multipurpose room adjoining study room located on the south end of the second floor of the Baugher Student Center. The Commuter Council is the official representative body of the commuter student. The Commuter Council has as its adviser the Administrative Assistant to the Director of Housing.

Center for Counseling and Student Development

The Center for Counseling and Student Development supports and assists individuals in their educational, personal, and social development. In educational development the Center helps students to develop effective study skills, to clarify academic and educational goals, and to choose majors. To facilitate exploration of those interests, aptitudes, and abilities which lie behind important academic decisions, the Center uses diagnostic tests and measurements. In personal and social development, the Center helps the student to explore and understand personal identity, attitudes, values, and motivations. Counseling sessions are considered confidential.

Counselors are also responsible for the academic advising of students who have not chosen a major. The staff also conducts a series of small-group experiences in a variety of interest and need areas. Interpersonal communication, stress control, assertiveness, time management, and human potential are some of the topics explored in past experiences. Counselors are available for consultation to all members of the college community. The Center for Counseling and Student Development is located in the Baugher Student Center.

Tutor Center

A tutoring service is available to any student experiencing academic difficulty in any course. Students are encouraged to use this service to maintain good academic standing and may sign up at the Wenger Center.

Writing Laboratory

The Writing Laboratory provides individual assistance to students who have immediate and long-term writing problems; it is located in Wenger Center.

Student Health Center

The College Health Center provides health care for the student population and emergency care for the college community. The Health Center treats minor illnesses and injuries, and encourages health education by offering health-related programs throughout the year. It also handles insurance claim forms for those students who subscribe to the Student Health and Accident Insurance.

Registered nurses are on duty 9:00 a.m.—5:00 p.m. Monday through Friday. Physician hours are also scheduled. All other hours are covered by an emergency “on call” system. The Health Center refers students to physicians in the community although, of course, students may choose the physician they wish to see. Referrals are also made to other community agencies. In addition, the Health Center has a formal association with a community clinic that includes a group of seven physicians specializing in family medicine.

Before registering for freshman classes, students entering Elizabethtown College should file the report of a physical examination. Students are required to show proof of rubella and rubeolla immunizations, as well as a recent tuberculosis test. The College will send health forms for physical examination to all entering students. The Health Center is located on South Mount Joy Street.

Career Development Center

The Career Development Center is designed to assist students with their career planning, development, and job placement. The office, located on the second floor of Baugher Student Center, houses a career library, maintains placement credentials, provides off-campus summer and part-time job listings, coordinates on-campus recruitment (business, industry, government, school districts, and graduate school visitations), and publishes a semi-monthly newsletter. The staff conducts and sponsors workshops, clinics, and seminars on various topics, e.g., career decision-making, career planning strategies, employability skills, and finding a job.

Each year, during one week in January, the Career Development Center conducts an Extern Program in concert with the Office of Alumni Relations. The program is designed to help a student choose a particular academic major, confirm a chosen academic major, establish more concrete career goals, or provide a brief on-the-job experience.

The program matches Elizabethtown College students with alumni and other sponsors who work with the student externs over the designated period of time. The externs receive no academic credit or salary; they do receive valuable firsthand experience in their field.

Campus Ministry

Because the student body of Elizabethtown College comprises individuals from many different religious backgrounds, programs sponsored by the Chaplain's Office are ecumenical in nature.

Major campus-wide religious programming is the responsibility of the Religious Life Committee, a representative body convened by the Chaplain and composed of twelve individuals who represent faculty, administrators, the various organized religious clubs, and the denominational groups on campus. Programs planned by the Chaplain's Office in cooperation with the Religious Life Committee have included such activities as a Jewish Seder, Church of the Brethren Love Feast, emphasis on World Hunger, Bible study, sharing groups, Christian Concerts, Religious Emphasis Week, and a regular Sunday evening vesper service.

Organized religious groups on the campus include Brethren Fellowship, Campus Fellowship, the Newman Club, Advocates for Peace, and Concepts of Hillel.

CAMPUS RESIDENCES

Accommodations

All six of the campus residence halls feature double occupancy rooms, lobby areas, laundry facilities, and areas for recreation and general student use. Students of all classes and various majors reside in each hall.

Founders Residence was completed in 1971, houses 328 men and women in four separate living areas (Beahm, Falkenstein, Hertzler, Zeigler Houses), and features small group suites.

Schlosser Residence, built in 1965, houses 206 women and features small group suites with carpeting and air conditioning throughout.

Myer Residence was completed in 1957, houses 130 women, and contains the campus dining room.

Royer Residence, dedicated in 1962, houses 133 women.

Ober Residence, built in 1960, houses 247 men in two wings.

Brinser Residence, dedicated in 1965, houses 144 men.

Cooperative Houses

In addition to the residence halls, there are three Cooperative Houses for selected groups of senior students only. The Cooperative Houses offer alternative small group living arrangements to meet the needs of seniors in their last semesters of college. In the houses, housekeeping chores are shared, food budgeting and preparation are a part of everyday life, and small group activities are planned by house members. Membership in the houses is determined by selecting groups of seniors who can promote and live in a cooperative setting.

Closings

The College will close all of its housing units during all official vacation periods. There will be no access to the buildings during these times.

Residency Requirements

All full-time students who are not residing with parents, legal guardians, or their spouses will be expected to live in campus-owned housing for their entire academic career. The College feels that the experience of living on campus contributes significantly to a student's educational and social growth. Exceptional circumstances may be reviewed by the Housing Contract Review Committee.

Housing Office

The Housing Office is located on the second floor of the Student Center. The Director of Housing and Assistant Director coordinate all housing arrangements and the entire residence hall program.

Within each residence hall, a Head Resident is responsible for supervising the resident assistant staff, advising the residence hall council, and caring for the general welfare of all students in the residence hall.

On each floor of every residence hall, a selected upperclass student called a Resident Assistant lives and works with the students. The Resident Assistant's responsibilities include initiating programs, serving nightly duty, handling administrative functions, and assisting in the enforcement of College and residence hall policies.

Each residence hall has a Residence Hall Council, made up of students elected from each floor. Their primary responsibilities are to promote student involvement in hall matters and programs, to channel students' concerns to appropriate departments, and to plan academic, cultural, and social programs for the residents.

A Residence Hall Central Council is a second elected student group which is responsible for distributing college allocated funds to the Residence Hall Councils. The Residence Hall Councils must prepare a proposal and budget for desired programs and request money through the Central Council.

STUDENT RIGHTS AND RESPONSIBILITIES

Membership in the Elizabethtown College community accords the student certain privileges and rights along with accompanying responsibilities. In an effort to ensure and protect the right to pursue the educational process, the college community as a whole must be sensitive to the welfare and behavior of its individual members.

The student assumes responsibility for awareness of and compliance with all existing rules, policies, public laws, and regulations as stated in the college catalog, student handbook, and any other official publication of the College. All new students receive a copy of *The Rudder*, the student handbook, during new student orientation.

Family Educational Rights and Privacy Act of 1974

Elizabethtown College affirms the Family Educational Rights and Privacy Act (the Buckley Amendment) which protects students' rights of access to any college records directly relating to them. Guidelines are found in the student handbook.

Title IX of the Educational Amendment Act of 1972

Elizabethtown College supports the Title IX statute which prohibits sex discrimination in any educational program or activity receiving federal financial assistance. A Title IX Committee exists to ensure compliance with the statute. A grievance procedure for Title IX concerns is outlined in the student handbook.

THE JUDICIAL SYSTEM

The Campus Judicial Board and the Appeals Board, composed of students, faculty, and administrators, have jurisdiction over violations of campus rules, policies, and regulations. The College embraces the principles of due process and individual student responsibility, and therefore initial efforts to settle violations are made individually at the lowest level of responsibility. Only when the matter cannot be resolved on a lower level is it referred to the appropriate board.

Alcohol

The College supports the statutes of the Commonwealth of Pennsylvania controlling the possession and use of alcoholic beverages by individuals under 21 years of age. It is contrary to the policy of the College for students of any age to purchase, possess, store, sell, or consume alcoholic beverages while under college jurisdiction.

Drugs

The College supports the local, state, and federal laws which make the possession, purchasing, distribution, and use of certain drugs illegal. Neither the College nor its students enjoy immunity from the statutes or their enforcement. Disregard of public laws by students on campus is a serious violation of college policy and regulations.

Firearms, Weapons

Use or possession of firearms, weapons, fireworks, explosives, or noxious chemicals is prohibited except when explicitly approved by the Dean of Student Affairs, Dean of the Faculty, or Director of Safety. Approval will only be granted when necessary for academic course work. Any weapons, firearms, or ammunition brought to the campus must be registered and deposited with the Department of Public Safety.

Motor Vehicles

Students are permitted motor vehicles on campus. All motor vehicles must be registered with the Department of Public Safety. Students must obtain parking decals and are bound by the motor vehicle regulations set forth in the manual published by the Department of Public Safety and distributed at registration time.

Smoking

For reasons of personal health, the College does not encourage the use of tobacco. Smoking is prohibited in classrooms, hallways, the dining room, the snack bar, lounges, and other places open to public gatherings, except residence halls.

Note: Student regulations are subject to change, pursuant to the action of appropriate campus groups.

Directory



Directory

THE FACULTY

Gerhard E. Spiegler, *President, Professor of Religion and Philosophy*
D.B., M.A., Ph.D., University of Chicago
(1985)

Frederick F. Ritsch, *Dean of the Faculty, Professor of History*
B.A., M.A., Ph.D., University of Virginia
(1984)

Emeriti

Mark C. Ebersole, *President Emeritus*
B.S., LL.D., Elizabethtown College; B.D., Crozer Theological Seminary; M.A., University of Pennsylvania; Ph.D., Columbia University (1977)

Charles S. Farver-Apgar, *Professor of Biology Emeritus*
B.S., M.S., Ph.D., University of Pittsburgh
(1946)

Edgar T. Bitting, *Edgar T. Bitting Professor of Accounting Emeritus*
B.S., Elizabethtown College; M.B.A., University of Pennsylvania; C.P.A. (1952)

Carl J. Campbell, *Professor of English Emeritus*
A.B., Franklin and Marshall College; M.A., University of Pennsylvania (1962)

Clarence G. Enterline, *Alumni Secretary and Director of Placement Emeritus*
B.S., Albright College; M.S., University of Pennsylvania (1956)

Elizabeth M. Garber, *Professor of Political Science Emerita*
A.B., LL.D., Hood College; M.A., George Washington University; Docteur de l'Université, University of Paris (1966)

Vera R. Hackman, *Dean of Women Emerita*
A.B., Elizabethtown College; A.M., Columbia University; Professional Diploma, Teachers' College, Columbia University; L.H.D., Elizabethtown College (1944)

Ira R. Herr, *Professor of Physical Education Emeritus*
A.B., Franklin and Marshall College; University of Pennsylvania; Temple University (1928)

Kathryn Nisley Herr, *Assistant Professor of Modern Languages Emerita*
A.B., Lebanon Valley College (1943)

Earl H. Kurtz, *Treasurer Emeritus*
B.S., Elizabethtown College; M.A., New York University; Ped.E., Elizabethtown College (1957)

Morley J. Mays, *President Emeritus*
A.B., Juniata College; A.M., University of Pittsburgh; Ph.D., University of Virginia; D.D., Bethany Theological Seminary; L.L.D., Elizabethtown College; L.H.D., Albright College (1966)

O. F. Stambaugh, *Professor of Chemistry Emeritus*
B.S., Lebanon Valley College; M.S., Ph.D., Pennsylvania State University (1946)

Robert S. Young, *Director of Special Gifts Emeritus*
(1950)

Carl W. Zeigler, *Professor of Religion and Philosophy Emeritus*
A.B., Elizabethtown College; M.Div., United Theological Seminary; D.D., Elizabethtown College (1959)

Professors

Robert K. Bing, *Professor of Occupational Therapy, Department Chair*
B.S., University of Illinois; M.A., Ed.D., University of Maryland; O.T.R., E.A.O.T.A. (1985)

Ernest A. Blaisdell, Jr., *Professor of Mathematics, Department Chair*
B.A., M.A., University of Maine; Ph.D., Temple University (1968)

I. L. Bossler, *Professor of Mathematics*
B.S., Ursinus College; M.S., Purdue University (1959)

John A. Campbell, Jr., *Professor of English*
B.S., M.A., Ph.D., University of Florida (1968)

Anna M. Carper, *Director of the Library*
A.B., Elizabethtown College; M.S., Columbia University (1960)

Eugene P. Clemens, *Professor of Religion and Philosophy*
B.A., Goshen College; M.A., Ph.D., University of Pennsylvania (1965)

Note: year indicates date of appointment at the College.

James L. Dively, *Professor of Biology, Department Chair*
B.S., M.S., Ph.D., Pennsylvania State University (1973)

J. Thomas Dwyer, *Professor of English*
A.B., M.A., Ph.D., University of Pennsylvania (1960)

John F. Harrison, *Professor of Music*
B.M., M.M., Florida State University; Ph.D., Bryn Mawr College (1967)

J. Robert Heckman, *Professor of Biology*
B.S., Elizabethtown College; M.Ed., Millersville State College; Ph.D., Pennsylvania State University (1964)

Jack L. Hedrick, *Professor of Chemistry*
B.S., Elizabethtown College; M.S., University of Pittsburgh (1963)

Frederic E. Hoffman, *Professor of Biology and Clinical Professor in Science Education*
B.A., M.S., Ph.D., Syracuse University (1969)

A. F. Kish, *Professor of Business, Program Director, Continuing Education*
B.S., Rutgers-The State University; M.S., University of Delaware (1963)

Donald E. Koontz, *Professor of Mathematics*
B.S., Juniata College; M.A., Pennsylvania State University; Ed.D. Temple University (1961)

Donald B. Kraybill, *Professor of Sociology, Department Chair*
B.A., Eastern Mennonite College; M.A., Ph.D., Temple University (1971)

J. Kenneth Kreider, *Professor of History, Department Chair*
A.B., Elizabethtown College; M.A., Ph.D., Pennsylvania State University (1964)

Henry M. Libhart, *Professor of Art, Department Chair*
A.B., Franklin and Marshall College; Equivalent Master's Degree certificate, Commonwealth of Pennsylvania (1959-64, 1967)

Richard L. Mumford, *Professor of History and Clinical Professor in Social Studies Education*
A.B., University of Pennsylvania; M.Ed., Ph.D., University of Delaware (1965)

Rollin E. Pepper, *Professor of Biology*
A.B., Earlham College; M.S., Syracuse University; Ph.D., Michigan State University (1964)

Zoe G. Proctor, *Professor of Chemistry*
B.S., Elizabethtown College; M.S., Bucknell University (1959)

William V. Puffenberger, *Professor of Religion and Philosophy*
B.A., Bridgewater College; B.D., Bethany Theological Seminary; Ph.D., Boston University (1967)

John P. Ranck, *Professor of Chemistry*
B.S., Elizabethtown College; M.A., Ph.D., Princeton University (1963)

D. Paul Rice, *Professor of Education*
A.B., Elizabethtown College; M.S., Ed.D., Temple University (1963)

Jobie E. Riley, *Professor of Communications*
B.A. Manchester College; M.Div., Bethany Theological Seminary; Ph.D., Temple University (1961)

Austin D. Ritterspach, *Professor of Religion and Philosophy*
B.A., Indiana University; M.Div., Union Theological Seminary; Ph.D., Graduate Theological Union (1967)

Wayne A. Selcher, *College Professor of International Studies, Department Chair of Political Science and Director of International Studies*
A.B., Lebanon Valley College; M.A., Ph.D., University of Florida (1969)

Ronald L. Shubert, *Professor of Mathematics*
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Carl N. Shull, *Professor of Music, Department Chair*
B.S., Bridgewater College; M.M., Northwestern University; Ph.D., Florida State University (1961)

Armon C. Snowden, *Professor of Religion and Philosophy*
A.B., Elizabethtown College; B.D., Crozer Theological Seminary (1957)

Martin O. L. Spangler, *Professor of Chemistry*
B.A., Bridgewater College; M.S., Ph.D., Virginia Polytechnic Institute and State University (1966)

Stanley T. Sutphin, *Professor of Religion and Philosophy, Faculty Marshal, Department Chair*
A.B., University of LaVerne; B.D. Bethany Theological Seminary; Th.D., Pacific School of Religion (1963)

Bela Vassady, Jr., *Horace E. Raffensperger Professor of History*
B.S., Pennsylvania State University; M.A., Ph.D., Temple University (1971)

Thomas R. Winpenny, *Professor of History*
B.A., M.A., Pennsylvania State University;
Ph.D., University of Delaware (1968)

Robert E. Ziegler, *Professor of Science Education, Department Chair*
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Associate Professors

Louise Baugher Black, *Associate Professor of English, Clinical Professor in English Education*
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Stanley K. Bowers, *Associate Professor of Education*
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Jay R. Buffenmyer, *Associate Professor of Business, Department Chair*
B.S., Elizabethtown College; M.P.I.A., Ph.D., University of Pittsburgh (1976)

Carl A. Callenbach, *Associate Professor of Education*
B.S., Pennsylvania State University; M.A., Appalachian State University; Ed.D., Pennsylvania State University (1972)

Hubert M. Custer, *Associate Professor of Physics*,
B.S., Carnegie-Mellon University; M.S., Franklin and Marshall College (1953-61, 1963)

Uldis Daiga, *Associate Professor of Modern Languages, Acting Department Chair*
B.S., University of North Carolina; M.A., Temple University (1965)

Paul M. Dennis, *Associate Professor of Psychology*
B.A., Bowdoin College; M.A., Ph.D., New School for Social Research (1968)

Robert D. Dolan, *Associate Professor of Mathematics, Clinical Professor in Mathematics Education*
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Darrell R. Douglas, *Associate Professor of Music*
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Russell E. Eisenbise, *Associate Professor of Sociology*
B.S., McPherson College; M.A., Temple University (1962)

Delbert W. Ellsworth, *Associate Professor of Psychology, Department Chair*
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Martha A. Eppley, *Associate Professor of Economics, Associate Dean of the Faculty for Student Academic Matters*
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Hugh G. Evans, Jr., *Associate Professor of Economics*
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Boyd Fox, *Associate Professor of Education*
B.S., M.S., Ed.D., Utah State University (1970)

E. Margaret Gabel, *Assistant to the Director of the Library and Head Cataloguer*
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George A. Gliptis, *Associate Professor of Business*
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B.A., St. Francis College; M.S.S.W., University of Wisconsin; Ph.D., University of Tennessee (1978)

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Thomas R. Leap, *Associate Professor of Computer Science*
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J. Henry Long, *Associate Professor of Sociology, Associate Dean of the Faculty for Continuing Education*
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Robert C. Moore, *Associate Professor of Communications, Department Chair*
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D. Kenneth Ober, *Associate Professor of Physical Education, Department Chair and Athletic Director*
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Raymond R. Reeder, *Associate Professor of Chemistry, Department Chair*
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Elisabeth D. Shaw Russell, *Associate Professor of English, Department Chair*
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B.S., M.Ed., Ph.D., Pennsylvania State University (1985)

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B.S., Eastern Mennonite College; M.A., Kent State University; Ph.D., Oregon State University (1980)

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B.S., LaSalle College (1983)

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Leonard A. Eiserer, *Assistant Professor of Psychology*

B.A., University of Maine; M.A., Ph.D., Bryn Mawr College (1981)

Robert G. Garrett, *Assistant Professor of Health and Physical Education*

B.S., East Stroudsburg State College; Ed.M., Temple University (1967)

James Paul Hala, *Assistant Professor of English*

B.A., M.A., Ph.D., University of Michigan, Ann Arbor (1984)

Joseph Harris, *Assistant Professor of English*

B.A., Haverford College; M.A., New York University (1984)

Maurice R. Hoppie, *Assistant Professor of Economics*

B.A., Knoxville College; M.S., Ph.D., University of Tennessee (1980)

Carole A. Huber, *Assistant Professor of English*

B.A., M.A., Southeast Missouri State University; Ph.D., Texas Christian University (1983)

Yvonne E. Kauffman, *Assistant Professor of Physical Education*

B.S., Bridgewater College; M.Ed., West Chester State College (1966)

J. Matthew Kessler, *Assistant Professor of Sociology*

B.A., University of Nebraska at Lincoln; M.A., Ball State University; Ph.D., Virginia Polytechnic Institute and State University (1984)

Grace L. Malcom, *Assistant Professor of Music*

B.M.Ed., Ithaca College; M.M. Ed., University of Kansas; R.M.T., (1981)

E. Fletcher McClellan, *Assistant Professor of Political Science*

B.A., Franklin and Marshall College; M.A., East Tennessee State University (1982)

W. Wesley McDonald, *Assistant Professor of Political Science*

B.A., Towson State University; M.A., Bowling Green State University; Ph.D., The Catholic University of America (1980)

Donald G. Muston, *Assistant Professor of Business*

B.S., M.B.A., Indiana University; B.I.M., American Graduate School of International Management (1977)

Kathleen E. Nuccio, *Assistant Professor of Social Work*

B.A., Fairleigh Dickinson; M.S.W., Fordham University (1984)

Paul Petersen, *Assistant Professor of Occupational Therapy*

B.S., Syracuse University; M.A., New York University; Ph.D., University of Nebraska at Lincoln (1984)

John Rohrkemper, *Assistant Professor of English*

B.A., M.A., Ph.D., Michigan State University (1981)

H. Andrew Sagar, III, *Assistant Professor of Psychology*

B.A., The American University; M.Div., Duke University; M.S., Ph.D. University of Pittsburgh (1980)

Reba M. Sebelist, *Assistant Professor of Occupational Therapy*

B.S., Elizabethtown College; M.S., University of Pennsylvania; O.T.R. (1977)

Donald P. Smith, *Assistant Professor of Physical Education*

B.S., University of Mississippi (1972)

Barbara C. Tulley, *Assistant Professor of Computer Science*

B.S., St. Bonaventure University; M.S., Worcester Polytechnic Institute (1974)

Mary Anne vanArsdale, *Assistant Professor of Business*

B.A., M.A., Glassboro State College (1985)

Hans-Erik Wennberg, *Assistant Professor of Communications and Director of Instructional Services*

B.S., State University College at Geneseo; M.Ed., Temple University (1984)

Joseph A. Whitmore, *Assistant Professor of Physical Education*

B.A., Bridgewater College (1968)

Instructors

Michael P. FitzGerald, *Instructor in Business*

B.B.A., University of Notre Dame; M.B.A., Temple University; C.P.A. (1985)

Mary Catherine Gavin, *Instructor in Occupational Therapy*

B.S., Mount Mary College; M.S., University of Wisconsin, Whitewater; O.T.R. (1982)

Marlene J. Morgan, *Instructor in Occupational Therapy*

B.S., The Pennsylvania State University; M.O.T., Texas Woman's University; O.T.R. (1982)

Arthur D. Roderick, III, *Instructor in Physical Education*
B.S., Elizabethtown College (1984)

Carole J. Simon, *Field Work Coordinator, Occupational Therapy*
B.S., University of Pennsylvania; O.T.R. (1982)

Susan J. Terrio, *Instructor in Modern Languages*
B.A. Colby College; M.A. Pennsylvania State University (1981)

ADJUNCT FACULTY

On Campus

C. Powell Adams, *Department of Business*
B.A., B.I.E., University of Florida; M.B.A., Pennsylvania State University

David D. Bailey, *Department of Business*
A.A., Lehigh County Community College;
B.B.A., Pennsylvania State University

Kay Anne Brady, *Department of Business*
B.A., Millersville University; M.P.A., Pennsylvania State University

Linda H. Campbell, *Department of English*
B.A., Elizabethtown College; M.A. Pennsylvania State University

Terry J. Cornish, *Department of English*
B.A., Elizabethtown College; M.S., Temple University

R. Daniel Cupper, *Department of Communications*
B.A., Pennsylvania State University

Shirley A. Deichert, *Department of English*
B.A., Elizabethtown College; M.S., Temple University

Caroline Denney, *Department of Business*
B.S., Pennsylvania State University; C.P.A.

C. William Eckenrode, *Department of Business*
B.S., University of Scranton; B.L., University of LaSalle; M.A., St. Francis College

Marcia L. Englar, *Department of Music*
B.M., B.M.E., Augustana College; M.M., Peabody Conservatory of Johns Hopkins University

Richard J. Fonte, *Department of Occupational Therapy*
B.S., Villanova University; M.D., College of Medicine and Dentistry of New Jersey

Timothy J. Galdencio, *Department of Business*
B.A., Elizabethtown College; M.S., University of Baltimore; C.P.A.

Dennis A. Getz, *Department of Business*
B.S., Elizabethtown College; C.P.A.

William H. Gray, *Department of Physics and Earth Science*
A.A., Harrisburg Area Community College

John A. Guerrisi, *Department of Business*
B.A., B.B.A., M.A., Pennsylvania State University

James H. Hess, *Department of Business*
B.S., Elizabethtown College; M.A., Temple University; C.P.A.

James L. Jackson, *Department of Computer Science*
B.S., Elizabethtown College

David E. Leithmann, *Department of Music*
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Abington, PA

All Saints Hospital
Wyndmoor, PA

Allied Services for the Handicapped
Scranton, PA

Betty Bacharach Rehabilitation Center
Pomona, NJ

Baltimore City Hospital
Baltimore, MD

Bergen Pines County Hospital
Paramus, NJ

Bryn Mawr Rehabilitation Hospital
Malvern, PA

Carlisle Hospital
Carlisle, PA

Coatesville VA Medical Center
Coatesville, PA

Columbia Day Care Center
Columbia, PA

Eaglesville Hospital and Rehabilitation Center
Eagleville, PA

Easton Hospital
Easton, PA

Elizabethtown Community Nursery School
Elizabethtown, PA

Elizabethtown Hospital and Rehabilitation Center
of the Pennsylvania State University
Elizabethtown, PA

Elizabethtown Child Care Center
Elizabethtown, PA

Eugenia Hospital
Lafayette Hills, PA

Fallston General Hospital
Fallston, MD

Fort Howard VA Medical Center
Fort Howard, MD

Garden State Rehabilitation Center
Tom's River, NJ

Good Samaritan Hospital
Baltimore, MD

Harrisburg Polyclinic Hospital
Harrisburg, PA

Harrisburg Hospital Community Mental Health
Center
Harrisburg, PA

Harrisburg State Hospital
Harrisburg, PA

Harmarville Rehabilitation Center
Pittsburgh, PA

Haverford State Hospital
Haverford, PA

Heatherbank Rehabilitation Center
Columbia, PA

Hershey Medical Center
Hershey, PA

Highland Health Facility
Baltimore, MD

Hospital of the University of Pennsylvania
Philadelphia, PA

Institute of Pennsylvania Hospital
Philadelphia, PA

Thomas Jefferson University Hospital
Philadelphia, PA

Johns Hopkins Hospital of Baltimore
Baltimore, MD

Kessler Institute for Rehabilitation
West Orange, NJ

Lancaster County Easter Seals
Lancaster, PA

Lancaster General Hospital
Lancaster, PA

Lancaster Osteopathic Hospital
Lancaster, PA

Lebanon VA Medical Center
Lebanon, PA

Magee Rehabilitation Hospital
Philadelphia, PA

Marlboro State Hospital
Marlboro, NJ

Maryland General Hospital
Baltimore, MD

Muhlenberg Medical Center
Plainfield, NJ

Norristown State Hospital
Norristown, PA

North Virginia Mental Health Institute
Falls Church, VA

NPW Medical Center
Wilkes-Barre, PA

New York University—Cornell Medical Center
White Plains, NY

Options
Lancaster, PA

Our Lady of Lourdes Hospital
Camden, NJ

Philadelphia Psychiatric Center
Philadelphia, PA

Philadelphia VA Medical Center
Philadelphia, PA

Pottstown Memorial Hospital
Pottstown, PA

Reading Hospital
West Reading, PA

Reading Hospital Day Treatment Center
West Reading, PA

Reading Institute of Rehabilitation
Reading, PA

Rehabilitation Hospital for Special Services at
Mechanicsburg
Mechanicsburg, PA

Rehabilitation Hospital for Special Services at
York
York, PA

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Pittsburgh, PA

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New York, NY

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Saint Joseph Hospital
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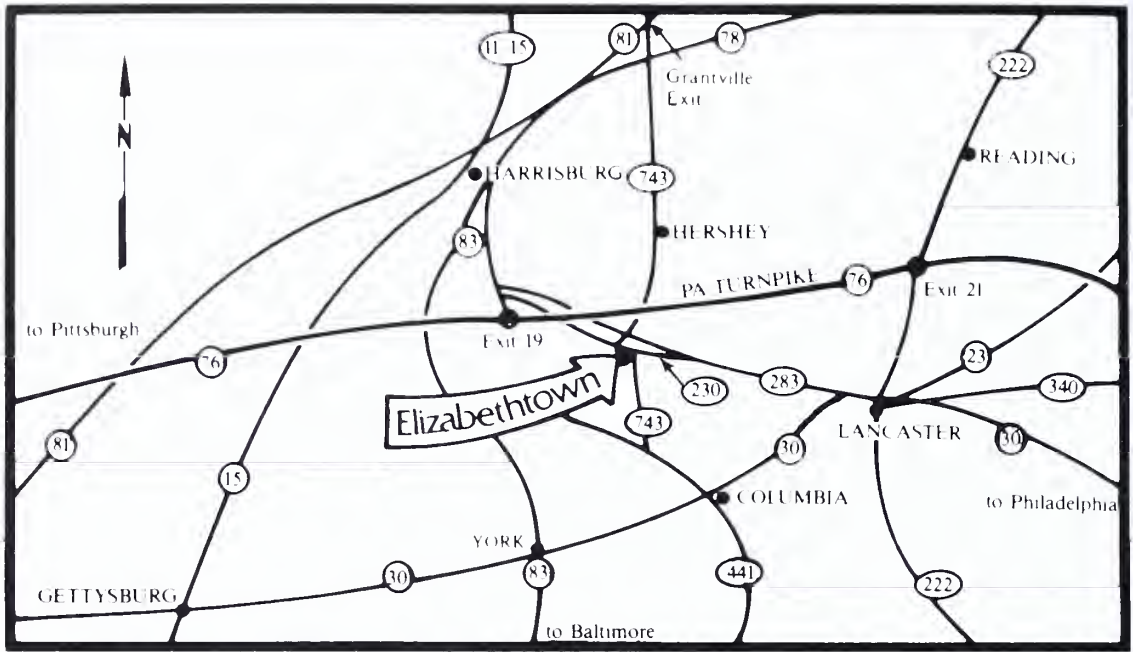
Note: year indicates expiration of term.

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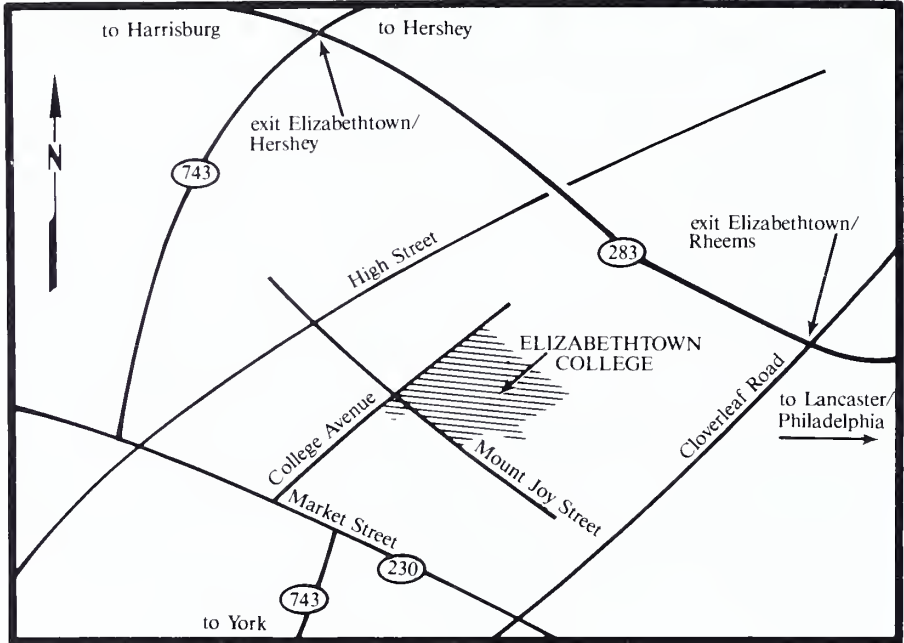
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**Maps are not to scale.*



from Hershey

follow Rt. 743 South to Elizabethtown; turn left onto Market Street; left again onto College Avenue

from Lancaster/Philadelphia

take Rt. 30 West to Rt. 283 West (not 30 West to York, see map) to Elizabethtown/Rheems exit; turn left onto Cloverleaf road and follow to Rt. 230; turn right onto Rt. 230 West and follow to Elizabethtown; turn right onto College Avenue

from Harrisburg (Turnpike exit 19)

take Rt. 283 East to Elizabethtown/Hershey exit; follow Rt. 743 South to Elizabethtown; turn left onto Market Street; left again onto College Avenue

from York

take Rt. 30 East to Columbia exit; follow Rt. 441 North; turn right onto Rt. 743 North and follow into Elizabethtown; turn left onto Market Street; turn right onto College Avenue

Brinser Hall
(men's residence)

Founders' Hall (men's
and women's residences)

Public Safety Office

Ober Hall
(men's residence)

Baughner Student Center
(dean of students,
financial aid, housing,
counseling center, book-
store, snack bar, student
post office, student
publications, chaplain,
alumni auditorium)

**Thompson Gymnasium
and Alumni Athletic
Center** (athletics,
physical education)

Eshenshade Hall (biology,
mathematics, occupational
therapy, physics,
psychology)

Musser Hall (chemistry)

Zug Memorial Library

Nicarry Hall (business,
computer science,
continuing education,
education, political science,
sociology/anthropology/
social work)

Steinman Center
(communications and art)

**Wenger Center for the
Humanities** (English,
history, religion/philosophy,
developmental studies)

**North, South, Central
Halls** (art, dance)

Rider Hall
(music,
chapel)

**Student
Health Center**

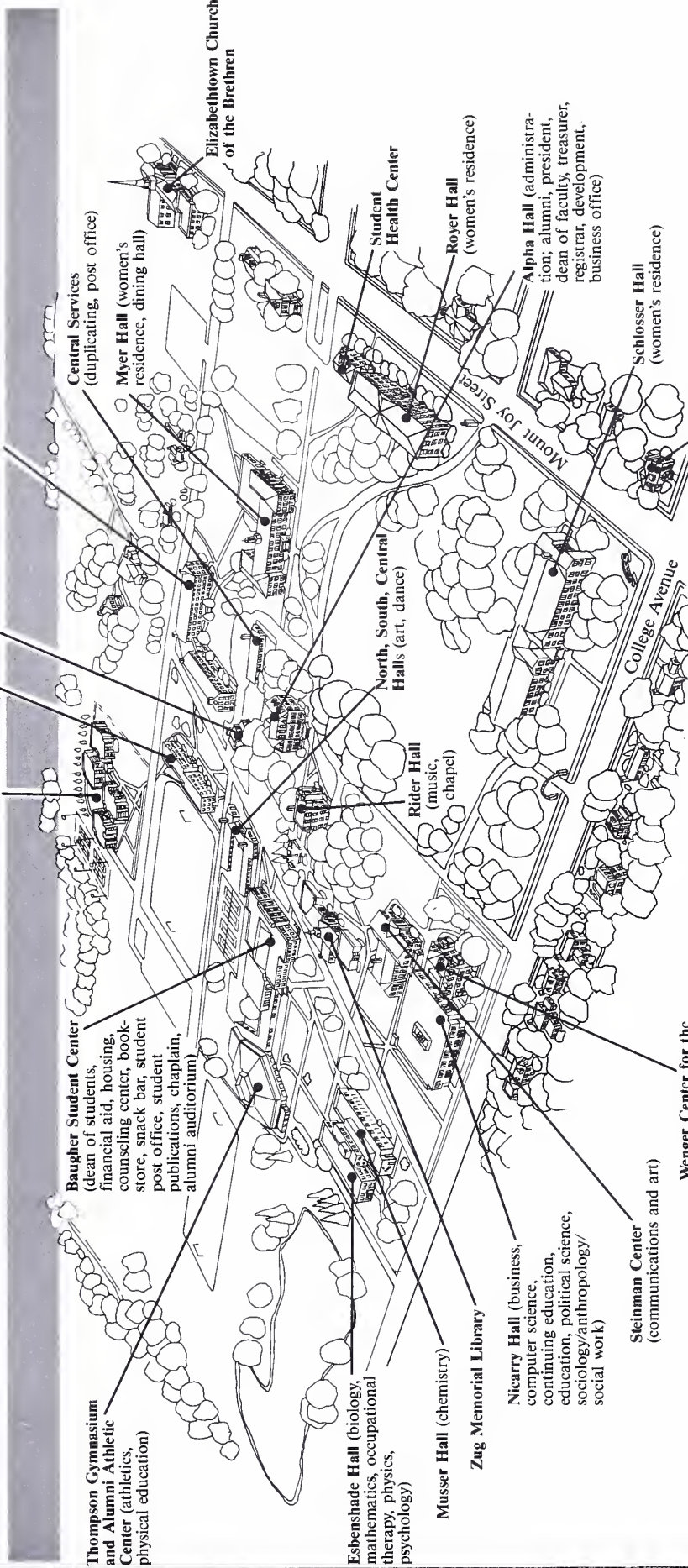
Royer Hall
(women's residence)

Alpha Hall (administra-
tion; alumni, president,
dean of faculty, treasurer,
registrar, development,
business office)

Schlosser Hall
(women's residence)

Leffler House (admissions)

**Elizabethtown Church
of the Brethren**



Elizabethtown College

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